

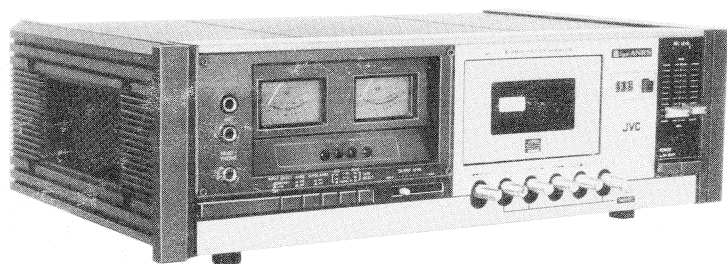
# JVC

## SERVICE MANUAL

MODEL

**KD-S200-2A/B/C/E/J/U**

STEREO CASSETTE DECK



No. 4157  
June 1977

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## Specifications

|                       |  |                         |  |
|-----------------------|--|-------------------------|--|
| Type                  | : Stereo cassette deck   | Input jacks             | : Mic jack x 2<br>Max. sensitivity; 0.2 mV<br>Matching impedance; 600Ω—10kΩ  |
| Track system          | : 4-track, 2-channel   |                         | Input jack x 2<br>Min. input level; 80 mV<br>Input impedance; 100 kΩ   |
| Cassettes             | : C-30, C-60, C-90   | Output jacks            | : Output jack x 2<br>Output level; 0—0.5 V<br>Output impedance; 0—3 kΩ<br>Matching load impedance; 50 kΩ<br>or more<br>Headphone jack x 1<br>Output level; 0.3 mW<br>Matching impedance; 8Ω—1 kΩ |
| Frequency response    |  | DIN connector (REC/PB): | Min. input level; 15 mV<br>Input impedance; 10 kΩ<br>Output level; 0—0.5 V<br>Output impedance; 0—3 kΩ<br>Matching impedance; 50 kΩ or<br>more   |
| Chrome *1             | : 20—18000 Hz (Nominal)<br>30—16000 Hz (Typical)   | Power requirement       | : AC 120 V, 60 Hz (KD-S200-2C/J)<br>AC 120 V, 220 V, 240 V, 50 Hz<br>(KD-S200-2A/B/E)<br>AC 100 V, 120 V, 200 V, 220 V,<br>50/60 Hz (KD-S200-2U)   |
| Normal *2             | : 20—17000 Hz (Nominal)<br>30—15000 Hz (Typical)   | Power consumption       | : 30 W   |
| Surpasses DIN 45500   |  | Dimensions              | : Width; 19-5/8" (501 mm)<br>Height; 6-1/4" (158 mm)<br>Depth; 12-5/8" (321 mm)  |
| Signal-to-Noise ratio | : 52 dB (JIS)<br>The S/N is improved by 5 dB<br>at 1 kHz and by 10 dB above<br>5 kHz with ANRS on.<br>60 dB with ANRS<br>(DIN 45500, weighted) | Weight                  | : 17.9 lbs (8.1 kg)  |
| Wow and Flutter       | : 0.20% (DIN 45500)  | *1 .....                | TDK SA or Equivalent   |
| Crosstalk             | : 65 dB  | *2 .....                | Maxell UD or Equivalent  |
| Harmonic distortion   | : 1.3% (normal tape)   |                         |  |
| Bias                  | : AC bias (95 kHz)   |                         |  |
| Erasure               | : AC erasure   |                         |  |
| Heads                 | : 2 heads<br>Sen-Alloy head for recording/play-<br>back and ferrite head (2 gap) for<br>erasure  |                         |  |
| Motor                 | : Electronically governed DC motor   |                         |  |
| Tape speed            | : 4.8 cm/sec.  |                         |  |
| Recording time        | : 2 x 30 minutes with C-60 cassette  |                         |  |
| Fast forward time     | : 125 sec. with C-60 cassette  |                         |  |
| Rewind time           | : 125 sec. with C-60 cassette  |                         |  |
| Semiconductors        | : 7 ICs, 26 transistors, 2 SCRs and<br>43 diodes   |                         |  |

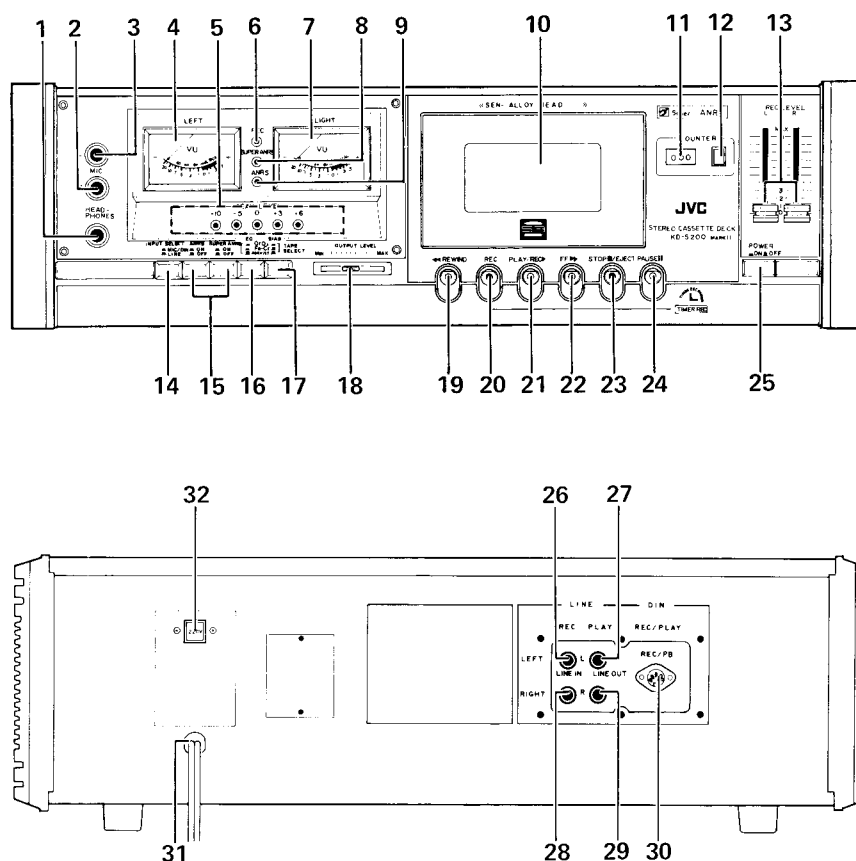
Design and specifications are subject to change without notice.

## Features

"Vertical-open-view" cassette deck  
 Multi-point peak level indicators  
 SEN-ALLOY head  
 IC built ANRS and Super ANRS employed  
 (Both U.S. patent pending)  
 ID (Independent Drive) mechanism

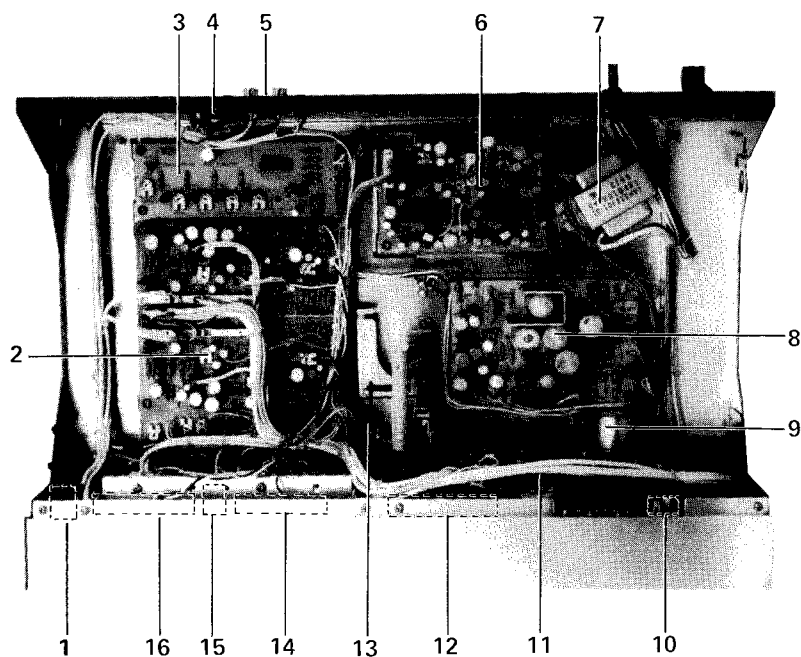
Timer recording  
 Full auto stop  
 Air-damped cassette door (Pat. pending)  
 Input select switch  
 Tape select switches  
 Output level control

## Controls and Connections



- |   |                                     |
|---|-------------------------------------|
| 1 Headphone jack (HEADPHONE)            | 17 TAPE SELECT BIAS switch          |
| 2 Right channel microphone jack (MIC-R) | 18 Output level control             |
| 3 Left channel microphone jack          | 19 Rewind button (◀◀ REWIND)        |
| 4 Left channel lever meter              | 20 Record button (REC)              |
| 5 PEAK level indicators                 | 21 Play button (PLAY/REC ▶)         |
| 6 REC indicator                         | 22 Fast forward button (FF ▶▶)      |
| 7 Right channel lever meter             | 23 Stop/Eject button (STOP ■/EJECT) |
| 8 Super ANRS indicator                  | 24 Pause button (PAUSE   )          |
| 9 ANRS indicator                        | 25 POWER switch                     |
| 10 Cassette door                        | 26 Left channel LINE IN terminal    |
| 11 Tape COUNTER                         | 27 Left channel LINE OUT terminal   |
| 12 Counter reset button                 | 28 Right channel LINE IN terminal   |
| 13 REC-LEVEL controls                   | 29 Right channel LINE OUT terminal  |
| 14 INPUT SELECT switch                  | 30 DIN socket (REC/PB)              |
| 15 ANRS and Super ANRS switches         | 31 Power cord                       |
| 16 TAPE SELECT EQ switch                | 32 Voltage selector                 |

## Main Parts Location



- 1 MIC jack circuit board
- 2 Main amp circuit board
- 3 Peak level circuit board
- 4 DIN jack
- 5 PIN jacks
- 6 ANRS circuit board
- 7 Power transformer
- 8 Power supply circuit board
- 9 Motor ass'y
- 10 CdS lamp
- 11 Flywheel ass'y
- 12 Head wire terminal circuit board
- 13 Air-damp pipe
- 14 Level meter (Right)
- 15 Indicator circuit board
- 16 Level meter (Left)

# Maintenance

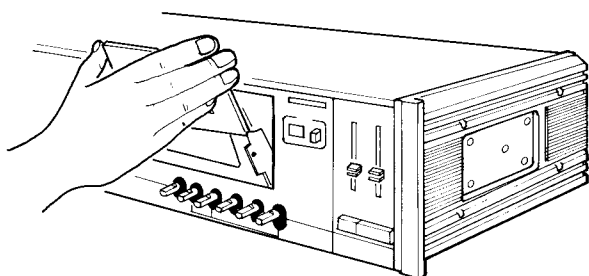
To get long, trouble-free service, maintenance is important. Do not forget cleaning and demagnetizing.

## Cleaning

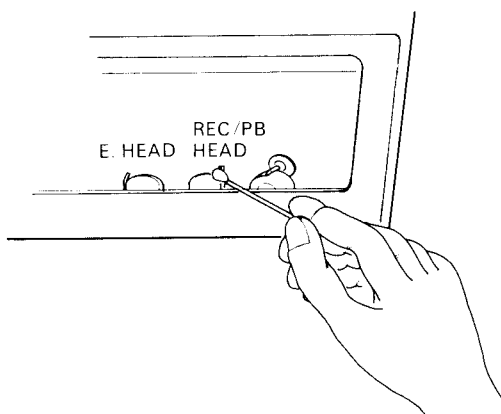
After long use, the heads and tape path — capstan, pinch roller, etc. — will become dirty with dust or magnetic particles. Dirty heads cause imperfect erasing or high frequency drop-off. A dirty capstan and pinch roller will cause unstable tape speed, leading to increased wow and flutter. Always keep them clean by the following procedure below.

### 1. Heads

- 1) Press the EJECT button with the POWER switch OFF to open the cassette door.
- 2) Remove the cassette door by sliding it upward.

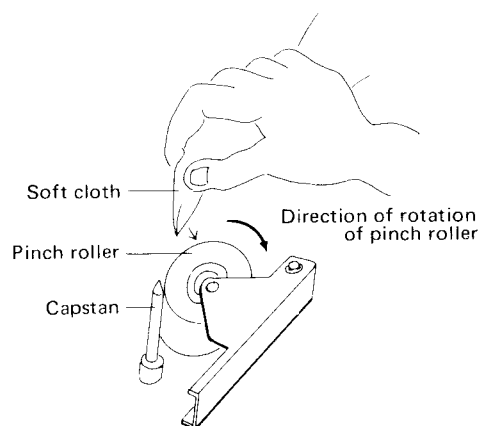


- 3) Press the PLAY button to move the heads out.
- 4) Use the head cleaning stick provided to wipe the surface where the tape comes into contact with the head.  
(It is effective to moisten the cotton with alcohol.)



### 2. Pinch roller and capstan

- 1) Press the EJECT button with the POWER switch ON to open the cassette door.
  - 2) Press the PLAY button, and the pinch roller will move out and rotate.
  - 3) Apply a soft cloth (soaked in alcohol, it will be more effective) to the rotating pinch roller and capstan.  
Be careful not to let the cloth get caught!
- \*Do not use any cleaner besides alcohol or a specifically prepared tape head cleaning solution.



### 3. Cabinet

When the cabinet becomes dirty, wipe it with a soft cloth soaked with a neutral cleaning solution of a polishing cloth.  
\*Do not use thinner or benzene.

## Demagnetizing

The heads are made from a material resistant to magnetization, but after long use they may become magnetized. A magnet brought into their vicinity can magnetize the heads, causing excess noise. If noise seems to have increased, demagnetize the heads with a head demagnetizer through the following procedure.

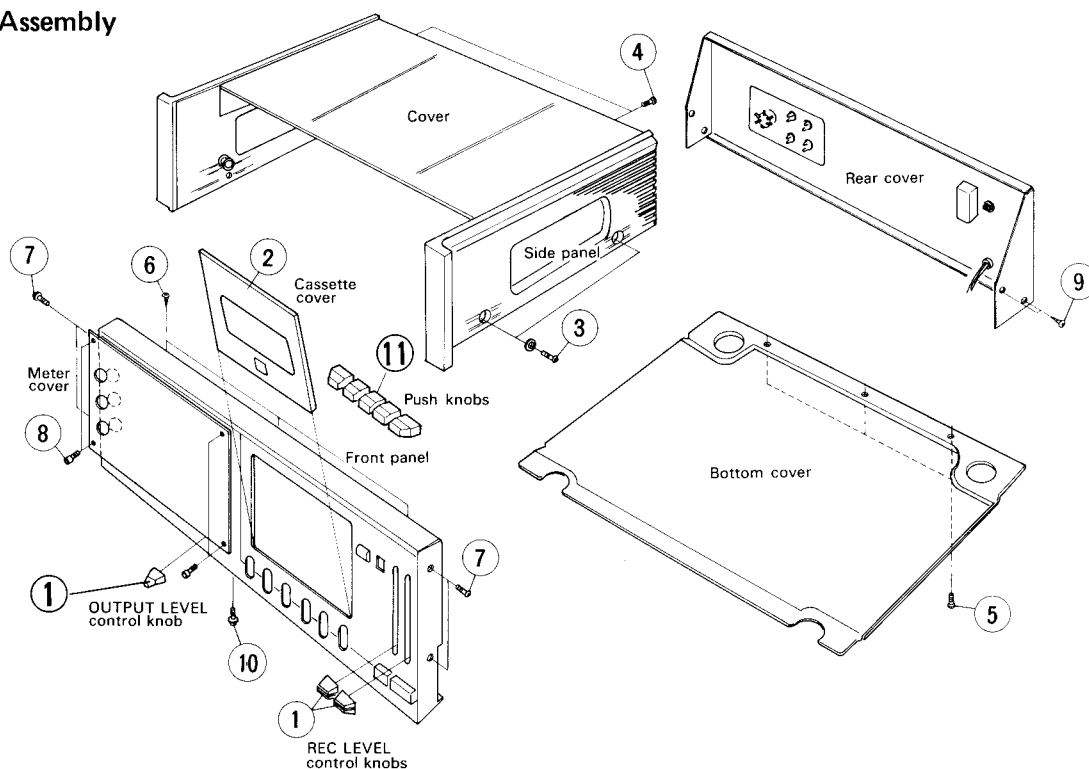
1. Push the POWER switch OFF.
2. Wrap the tip of the demagnetizer with vinyl tape or soft cloth so as not to damage the head surface. Switch on the demagnetizer and bring it close to the head.
3. Move the tip of the demagnetizer slowly first to the left and right, then up and down in front of the head. Gradually move it away from the head and switch it off at a distance of more than 30 cm (12").
4. The erase head need not be demagnetized. The capstan shaft and tape guide should be demagnetized in the same way as the record/playback head.

\*Do not bring a magnetized metallic object (a screwdriver, for example) near the head as this will increase noise.

# Main Parts Removing

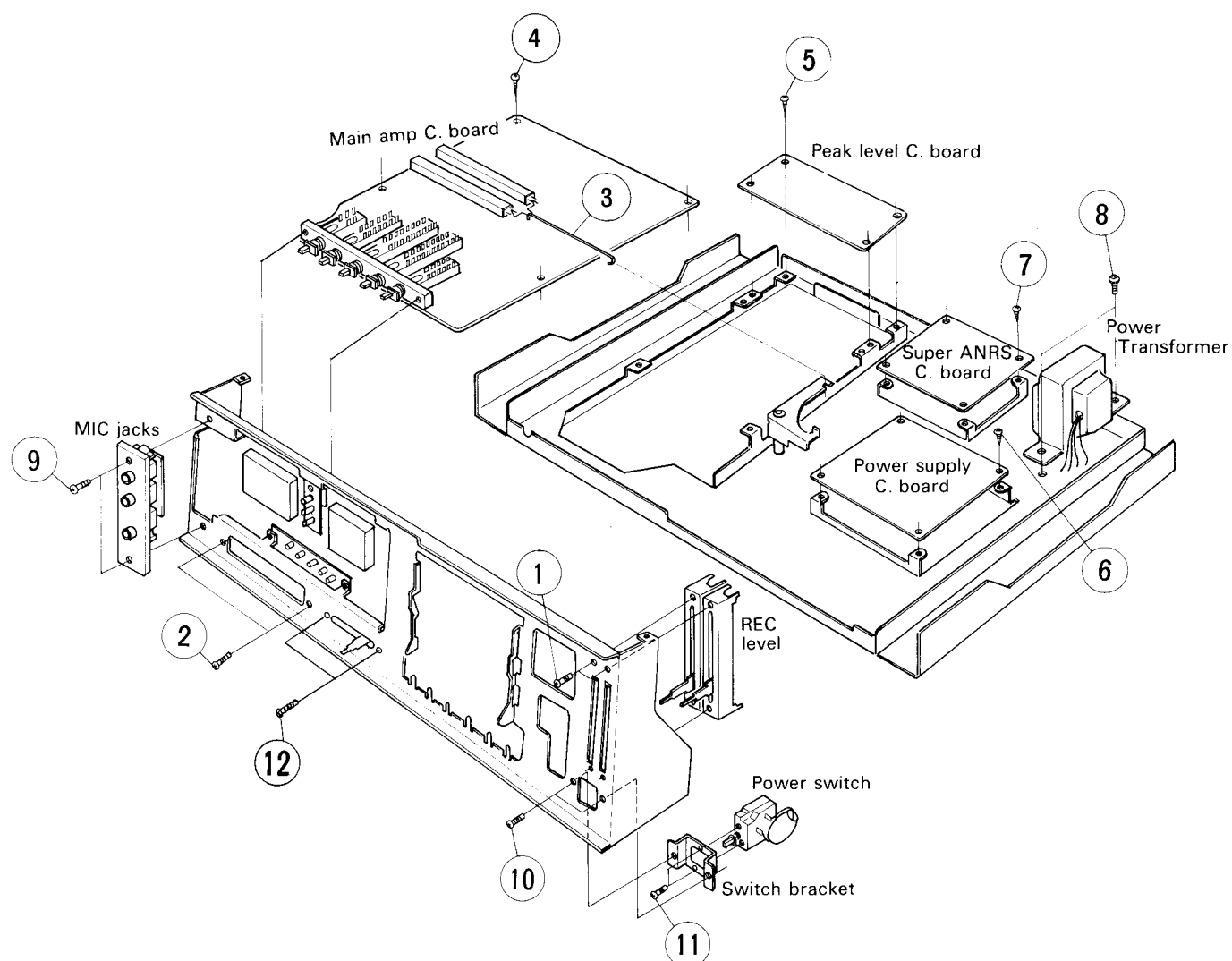
This cassette deck which features a compact design and high performance uses miniature-sized parts which are closely arranged. Use special care when servicing it.

## Enclosure Assembly



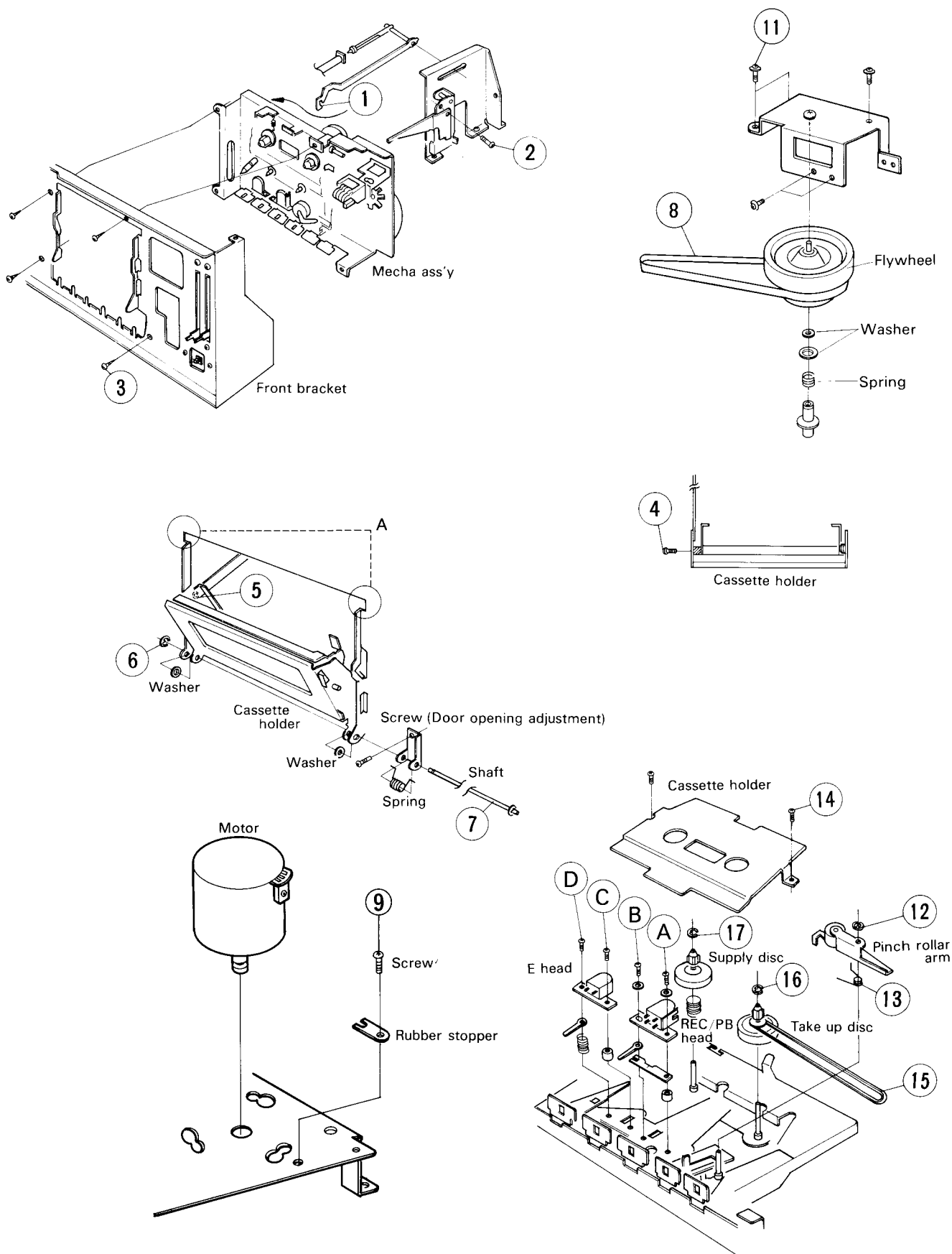
| Parts Name  | Procedure   | Ref. No. | Remarks  |
|---|---|----------|--|
| OUTPUT LEVEL control knob and REC LEVEL control knobs | Pull off the knobs to front side.   | ①        |  |
| Cassette door   | 1. Press the EJECT button to open the cassette door.<br>2. Remove the cassette door by sliding it upward.                               | ②        | <ul style="list-style-type: none"> <li>○ When the cassette door be removed, can easy clean or demagnetize the head.</li> <li>○ When you replace the cassette door, insert it that ball bearings be full locked.</li> </ul> |
| Cover (with side panel)                               | 1. Remove 2 screws and washers of both sides (L & R).<br>2. Remove 2 screws of rear side.   | ③<br>④   | Almost all parts of circuit board can be checked when only the cover is removed.   |
| Bottom cover  | 1. Remove 3 screws and 3 washers fastening the bottom cover.<br>2. Remove one screw of the front panel.                                 | ⑤<br>⑩   | <ul style="list-style-type: none"> <li>○ 3φ 6 mm screws</li> <li>○ 3φ 12 mm screws</li> <li>○ Almost all pattern side of circuit board can be checked when only bottom cover is removed.</li> </ul>                        |
| Front panel   | 1. Remove 5 tapping screws fastening up side of the F. panel.<br>2. Remove 4 screws fastening the left and right sides of the F. panel. | ⑥<br>⑦   | Remove the front panel after removing the cover and the bottom cover.  |
| Push knobs  | Pull off the push knobs to front side.  | ⑪        | Input select, ANRS, Super ANRS, Tape select  |
| Meter cover   | Remove 4 special screws fastening the meter cover.  | ⑧        |  |
| Rear cover  | Remove 4 screws (L and R sides of the rear cover) fastening the rear cover.   | ⑨        | Remove the rear cover after removing the cover and the bottom cover.   |

## Electrical Parts



| Parts Name              | Procedure  | Ref. No.    | Remarks  |
|-------------------------|--|-------------|--|
| REC LEVEL controls      | Remove 4 screws fastening the front bracket.   | ①           | Remove the V. Resistor after removing the front panel.             |
| Main amp. circuit board | 1. Remove 2 screws fastening the switch ass'y.<br>2. Remove rod of the recording lever.<br>3. Remove 4 tapping screws fastening the main amp. circuit board. | ②<br>③<br>④ | Remove the main amp. circuit board after removing the front panel. |
| Peak level C. board     | Remove 4 tapping screws fastening the peak level C. board.   | ⑤           |  |
| Power supply C. board   | Remove 4 tapping screws fastening the power supply C. board.   | ⑥           |  |
| Super ANRS C. board     | Remove 4 tapping screws fastening the Super ANRS C. board.   | ⑦           |  |
| Power transformer       | Remove 2 screws fastening the power transformer.   | ⑧           |  |
| MIC jack ass'y          | Remove 2 screws fastening the MIC jack ass'y.  | ⑨           | The left side of front bracket.                                    |
| Power switch ass'y      | 1. Remove 2 screws fastening the SW bracket.<br>2. Remove 2 screws fastening the power SW ass'y.   | ⑩<br>⑪      |  |
| Output level control    | Remove 2 screws fastening the front bracket.   | ⑫           | Remove the V. Resistor after removing the front panel.             |

## Mechanical Parts





| Parts Name             | Procedure   | Ref. No.    | Remarks  |
|------------------------|---|-------------|--|
| Mecha. ass'y           | 1. Depress the EJECT button to open the cassette door.<br>Remove the brake arm from stud of cassette holder.<br>2. Remove a screw fastening the recording arm.<br>3. Remove 4 screws fastening the front bracket.<br>4. Pull off the mecha. ass'y to back side. | ①<br>②<br>③ | When removing the brake arm, be careful not to stain the "O" ring and don't less grease.   |
| Cassette holder        | 1. Remove a screw fastening the cassette holder.<br>2. Remove "E" ring holding the shaft.<br>3. Pull off the shaft to right side.<br>4. Remove the cassette holder by sliding it upward on A position of panel bracket.   | ④<br>⑥<br>⑦ | When replacing the cassette holder, don't forget spring and 2 washers of the shaft.  |
| Motor                  | 1. Remove the take up belt.<br>2. Remove the capstan belt.<br>3. Remove a screw fastening the rubber stopper.<br>4. Remove rotating angle 35° the motor.  | ⑧<br>⑨      | Be careful not to stain the belt.  |
| Flywheel               | 1. Remove 2 screws fastening the muting SW bracket.<br>2. Remove the capstan belt.<br>3. Remove 5 screws fastening the flywheel holder.<br>4. Pull off the flywheel.  | ⑪           | Be careful not to stain the belt. When replacing the flywheel, don't forget to insert a nylon washer to its shaft. (as same spring and washer) |
| Pinch roller arm ass'y | 1. Remove "E" ring holding the pinch roller arm ass'y.<br>2. Remove spring on the arm ass'y.  | ⑫<br>⑬      |  |
| Take-up disc           | 1. Remove 2 screws fastening the cassette holder.<br>2. Remove the counter belt.<br>3. Remove "E" ring holding the take-up disc.<br>4. Pull off the disc from the shaft.  | ⑭<br>⑮<br>⑯ |  |
| Supply disc            | 1. Remove the cassette holder.<br>2. Remove "E" ring holding the supply disc.<br>3. Pull off the disc from the shaft.   | ⑰           |  |

**NOTE:** 1. Don't dirty, slippery and undue run-out the capstan belt and counter belt.

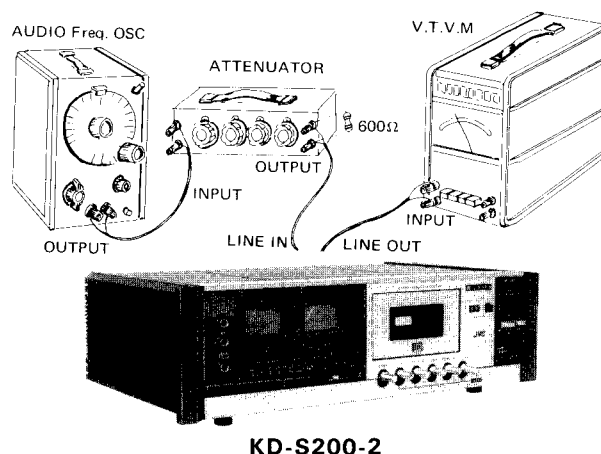
2. Adjust height of the motor pulley, when the capstan belt connect to the flywheel from the motor pulley, so that it will be parallel to the chassis.

# Adjustments

## Electrical Adjustment

Equipment and measuring instruments used for adjustment.

1. V.T.V.M. (measuring AC in millivolt)
2. Audio-frequency oscillator  
(range: 50 Hz – 20 kHz and output 0 dB with impedance 600  $\Omega$ )
3. Attenuator
4. Reference tapes for REC/PB  
Maxell-UD – normal tape  
TDK-SA – chrome tape
5. Reference tapes for playback  
VTT-664 (1 kHz 16 mM)  
VTT-666 (400 Hz 22 mM)
6. Resistors  
100  $\Omega$  (for measurement of the bias current)  
600  $\Omega$  (for attenuator matching)



KD-S200-2

Fig. 8

| No. | Item                   | Procedure   | Part   | Rating                            | Remarks  |
|-----|------------------------|---|--|-----------------------------------|--|
| 1.  | Level meter deflection | <ol style="list-style-type: none"> <li>1. Set the deck in the record mode, and set INPUT SELECT switch at LINE IN.</li> <li>2. Input 1 kHz signals (about 10 dBs) from LINE IN jacks and adjust volume control so that test points <u>12</u> and <u>62</u> are -3dBs.</li> <li>3. Adjust semi-fixed resistors VR103 and 203 in this condition it obtain zero VU meter reading.</li> </ol>   | (Main amp.<br>C. board<br>TAA305204)<br><br>VR103, 203   |                                   | The angle of meter deflection has been factory-adjusted, but should be adjusted when parts are replaced.<br><br>When adjust the level meter, don't use a headphone.  |
| 2.  | Peak level             | <ol style="list-style-type: none"> <li>1. Set as same mode at step (1) and adjust semi-fixed resistor VR703 so that the "0" indicator is lighting and no lighting at -1 dB from step (1) with attenuator.</li> <li>2. Adjust semi-fixed resistor VR704 so that the "-5" indicator is lighting at -5 dB from step (1) with attenuator.</li> <li>3. Adjust semi-fixed resistor VR705 so that the "-10" indicator is lighting at -10 dB from step (1) with attenuator and no lighting at -11 dB from step (1) with attenuator.</li> <li>4. Adjust semi-fixed resistor VR702 so that the "+3" indicator is lighting at +3 dB from step (1) and no lighting at +2 dB from step (1) with attenuator.</li> <li>5. Adjust semi-fixed resistor VR701 so that the "+6" indicator is lighting at +5 dB from step (1) with attenuator.</li> </ol> | (Peak level<br>C. board<br>TAA305306)<br>VR703<br>VR704<br><br>VR705<br><br>VR702<br><br>VR701 |                                   |  |
| 3.  | Playback sensitivity   | <ol style="list-style-type: none"> <li>1. Set equalizer switch at normal and playback reference tape VTT-664. Adjust semi-fixed resistors VR101 (L) and VR201 (R) so that test points <u>12</u> and <u>62</u> are -3 dBs, then level meters indicate zero VU (about 0.5 V at LINE OUT).</li> <li>2. Playback reference tape VTT-666 and check that the VU meter indicates CAL.</li> </ol>   | (Main amp.<br>C. board<br>VR101, 201   | -3 dBs<br><br>zone of<br>CAL mark | <ol style="list-style-type: none"> <li>1. Adjust playback sensitivity when heads are replaced.</li> <li>2. Make this adjustment after making sure level meter deflection angle is correct.</li> <li>3. Raise the output level control to maximum.</li> </ol> |

| No. | Item                                | Procedure  | Part  | Rating                             | Remarks   |
|-----|-------------------------------------|--|---|------------------------------------|---|
| 4.  | Bias current                        | <ol style="list-style-type: none"> <li>Set the deck in record mode. Insert a <math>100\Omega</math> resistor into the ground side wiring of the head and connect the V.T.V.M. across the resistor, and set the BIAS SW at chrome or normal. First adjust for chrome tape, then for normal tape.</li> <li>After the deck correct the head wires, input the standard level of 1 kHz signals to use reference tape, and measure REC/PB frequency response at 10 kHz.</li> <li>Adjust semi-fixed resistors VR502, 504 (chrome), 501, 503 (normal) so that the 10 kHz frequency response does become <math>\pm 0</math> dBs. Repeat the recording and playback so that 10 kHz signals become correct frequency response. Level over at 10 kHz compared with 1 kHz — bias current less<br/>Level less at 10 kHz compared with 1 kHz — bias current over</li> </ol>   | Main amp.<br>C. board<br>Chrome<br>VR502,<br>504<br>Normal<br>VR501,<br>503 | Chrome<br>45 mV<br>Normal<br>30 mV | <ol style="list-style-type: none"> <li>Adjust bias current when heads or other parts are replaced.</li> <li>Use the highclass V.T.V.M. for high frequency response.</li> <li>After the bias current adjustment, check the frequency response at 10 kHz signals.</li> </ol>  |
| 5.  | Recording signal current            | <ol style="list-style-type: none"> <li>Set the deck in the record mode.</li> <li>Input the 1 kHz signals to LINE IN jacks and adjust the recording level control so that the test points [12] and [62] are -13 dBs, make recording in such a way.</li> <li>Adjust the semi-fixed resistors VR104, 204 (chrome), VR105, 205 (normal) so that the test points are -13 dBs.</li> </ol>  | (Main amp.<br>C. board)<br><br>Chrome<br>VR104,204<br>Normal<br>VR105,205   |                                    | <ol style="list-style-type: none"> <li>This adjustment is necessary when heads are replaced.</li> <li>Make this adjustment after adjusting steps (1) through (4).</li> <li>Check the frequency response at 10 kHz after this adjustment.</li> <li>Set EQ and BIAS switches according to type of tape used.</li> </ol> |
| 6.  | Super ANRS circuit<br><br>(DC bias) | <ol style="list-style-type: none"> <li>Disconnect +B of bias circuit so that oscillator does not operate. (Desolder the BIAS CUT in main amp circuit board.)</li> <li>Set the deck in the record mode.</li> <li>Apply signal of 1 kHz 0 dBs to LINE IN and adjust volume control so that test points [12] and [62] (in main amp circuit board) are 0 dBs.</li> <li>Then, connect the V.T.V.M. to test points (h) (H) in main amp circuit board and adjust below steps.</li> <li>Apply signal of 1 kHz, -40 dBs to LINE IN and adjust VRA01, B01 so that the level of the test points (h) and (H) is -34.3 dBs with ANRS ON.</li> <li>Apply signal of 5 kHz, -20 dBs to LINE IN and adjust VRA02, B02 so that the level of the test points (h) and (H) is -17.5 dBs with ANRS ON.</li> <li>When apply signal of 1 kHz to LINE IN and the level of the test points (h) and (H) is 0 dBs, adjust steps (5) through (6) so that level does not change when ANRS is turned on and off (<math>\pm 0.5</math> dB less).</li> <li>At input 10 kHz, adjust REC level control so that LINE OUT become -1 dB, and then at (OFF—ON) the super ANRS switch, check its level that output level become -6 dB down.</li> <li>Play back reference tape VTT-664 and check LINE OUT level so that it's compare are <math>\pm 1</math> dB less with ANRS SW on to off.</li> <li>Connect +B of bias circuit (Solder the printed in main amp circuit board for connect +B).</li> </ol> |   |                                    | <ol style="list-style-type: none"> <li>Set figure of ANRS circuit.</li> <li>Repeat steps (5) through (6).</li> </ol> <p>Step (5) is 5.7 dB up.</p> <p>Step (6) is 2.5 dB up.</p>  |

## Mechanical Adjustment

### 1. Replacement and adjustment of the head

(See (A) (B) (C) (D) in Fig. 8.)

If either of the record/playback head and the erase head shown low performance because of wear, broken wire or excessive magnetization, it should be replaced.

| Part        | Screws to be removed |
|-------------|----------------------|
| REC/PB head | (A) , (B)            |
| E head      | (C) , (D)            |

### REC/PB head

After replacement, adjust the head for azimuth.

1. Insert the cord plug into the LINE OUT jack (or REC/PB), and connect the other end of the cord to a V.T.V.M. (vacuum tube voltmeter).

2. Play the azimuth adjustable test tape (e.g. JVC's VTT-653, 10 kHz).

3. Turn the azimuth screw (B) so that the output will become maximum.

If the azimuth adjustment test tape is not available, play a music cassette.

When treble response becomes optimum, set the adjustable screw (B).

4. After this adjustment, the screw (B) should be locked with a bond.

If necessary, adjust playback sensitivity, REC bias current, REC signal current and bias trap.

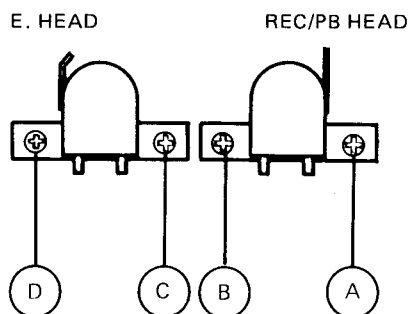
### Erasing head

After replacement, adjust the head for height position.

1. Play the test tape (C-120) without cassette holder.

2. Turn the adjustable screw (D) so that the test tape moves running to no curl the tape guide tip (up or under side).

If checking is difficult, cut front upper side of the cassette of C-120 by a cutter knife, etc., then can easy check it.



### 2. Adjusting the motor speed

1. Play back reference tape (3000 Hz) and adjust the semi-VR in the motor that its speed become  $3000 \text{ Hz} \pm 2 \%$  (2940 Hz – 3060 Hz).

2. KD-S200-2 need not to change cycle, whether the commercial frequency in your area is 50 or 60 Hz.

### 3. Standard torque

Fast forward torque : 70 gr-cm or more

Rewinding torque : 70 gr-cm or more

Take-up torque : 35–70 gr-cm

No. 4157

# Troubleshooting Guide

## [ELECTRICAL CIRCUIT]

### 1. Playback tone quality is poor.

1. Check the record/playback head for dust.

2. Check the record/playback head for wear.

If worn excessively, the loss of treble response will result.

3. Check wiring for a short-circuit.

Check each transistor for condition.

### 2. Recording tone quality is poor.

The playback tone quality of a recorded tape such as the audition tape is good, but the recording by this unit produces poor tone quality. In this case, the unit should be checked in the following manner.

1. By monitoring a music while recording, check the tone quality.

2. If found poor, check the wiring of the recording system for a broken wire and short-circuit.

3. If no irregularity is found, check the recording bias current. Also check the oscillation circuit.

3. For other failures, check the unit in the same manner as other amplifiers.

**[MECHANICAL SECTION] (wow and flutter)**

If wow and flutter increase, check the following points.

If there is defect in revolving parts, the wow and flutter generated will increase in proportion to the number of

revolutions.

Play a 3000 Hz test tape, and defective part can be detected from the sound.

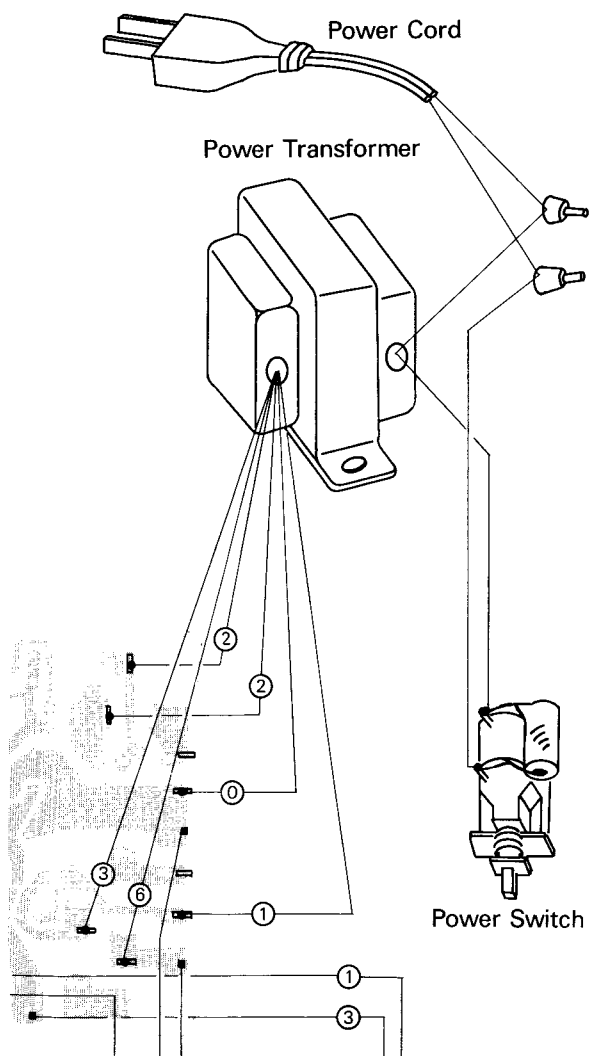
| Section               | Trouble   | Repair  |
|-----------------------|---|---|
| Capstan and fly-wheel | Capstan shaft has excessive run-out.<br>Flywheel turns heavily. (shaft, seizure, thrust play, etc.)   | Replace flywheel.<br>Adjust plastic screw with flywheel holder.<br>Clean the capstan shaft and the groove in the flywheel.<br>Apply oil to the metal position.<br>Replace the capstan assembly. |
| Pinch roller          | Rough rotation (Deformation scratches, or dust).<br>The angular position of the pinch roller is not correct.<br>The pinch roller pressure is not correct. | Replace pinch roller.<br>Clean the pinch roller or apply oil to the rotary shaft.<br>Adjust the pinch roller so that it is parallel with the capstan shaft.<br>Adjust the pinch roller spring.  |
| Belt                  | Belt has undue run-out.<br>Belt is dirty or slippery.   | Clean the belt or remove the distortion.<br>Replace the belt.   |
| Back tension          | Back tension is irregular, or back tension is too strong.   | Replace supply disc.<br>Replace back tension spring (under supply disc), or apply silicon grease.   |
| Motor                 | Motor shaft has undue run-out.<br>Motor pulley is oily and dusty.   | Replace motor.<br>Clean motor pulley.   |
| Take-up idler arm     | Pulley has deflection.<br>Pulley is stuck.  | Replace take-up idler arm.  |

**[MECHANICAL REPAIRS]**

| Section             | Trouble  | Repair  |
|---------------------|--|---|
| Take-up idler arm   | Standard take-up torque not available.                   | Replace take-up idler arm.<br>Replace take-up idler arm pressure spring.<br>Clean or replace capstan belt.<br>Clean rubber rim of the right reel.   |
| Reel disc and idler | Fast forward torque not available.                       | Clean rubber rim of the right reel or replace reel disc assembly.<br>Clean or replace fast-forward idler.<br>Clean rubber rim of the left reel or replace reel disc assembly.<br>Clean rewind idler tire. |
| Door brake          | Door does not open fully.<br><br>Braking not sufficient. | Apply a small quantity of silicon grease to the inside surface of the brake pipe.<br>(SHIN ETSU KAGAKU KS-64 or equivalent)<br>Replace brake piece or rubber O-ring.                                      |
| Auto-stop mechanism | Auto-stop not operating.                                 | Check slide lever and solenoid iron core for smooth movement.<br>Check if the locking and sliding parts of the operation button cam are well coated with molybdenum.                                      |

# Wiring

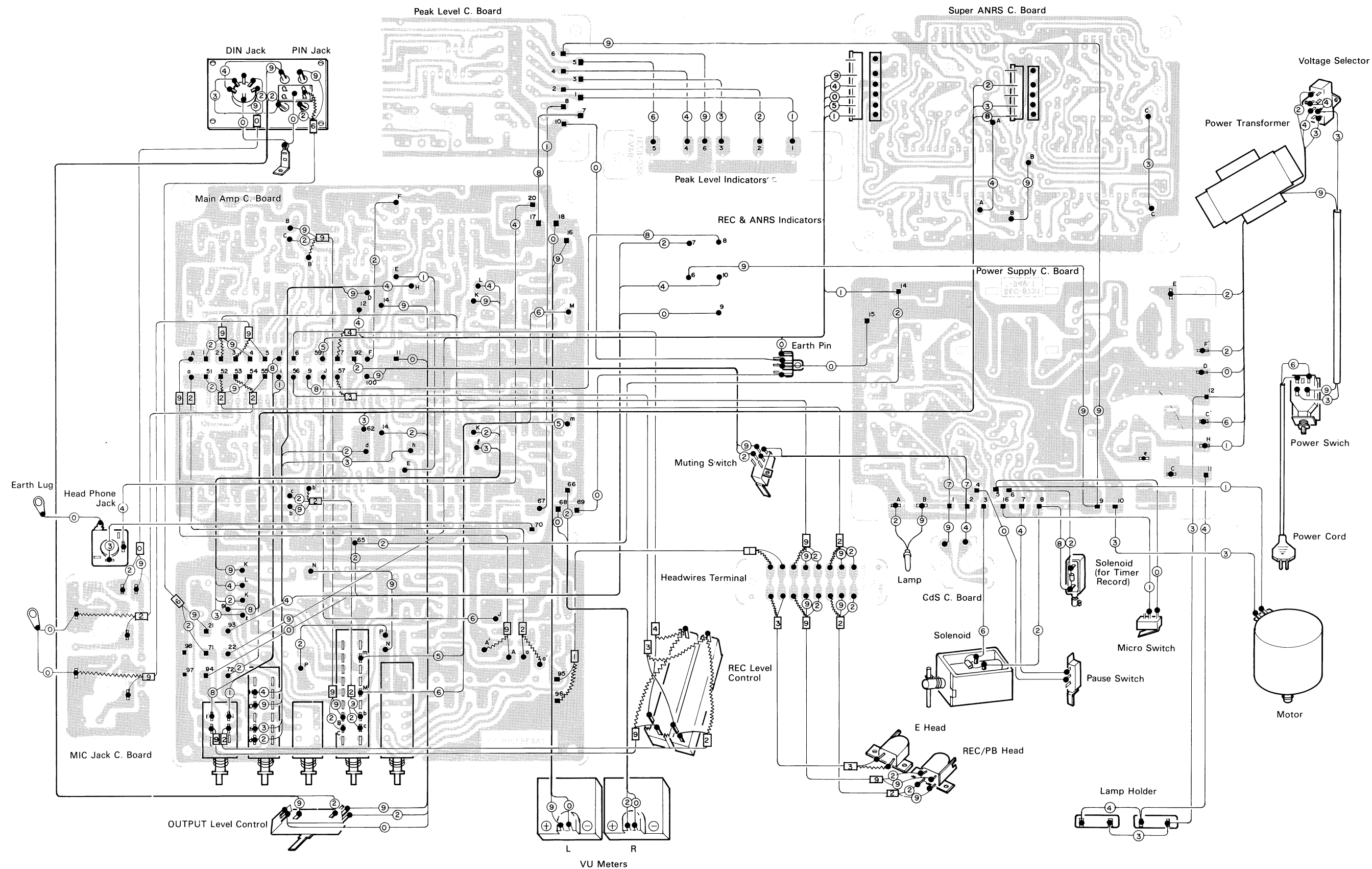
KD-S200-2 C/J



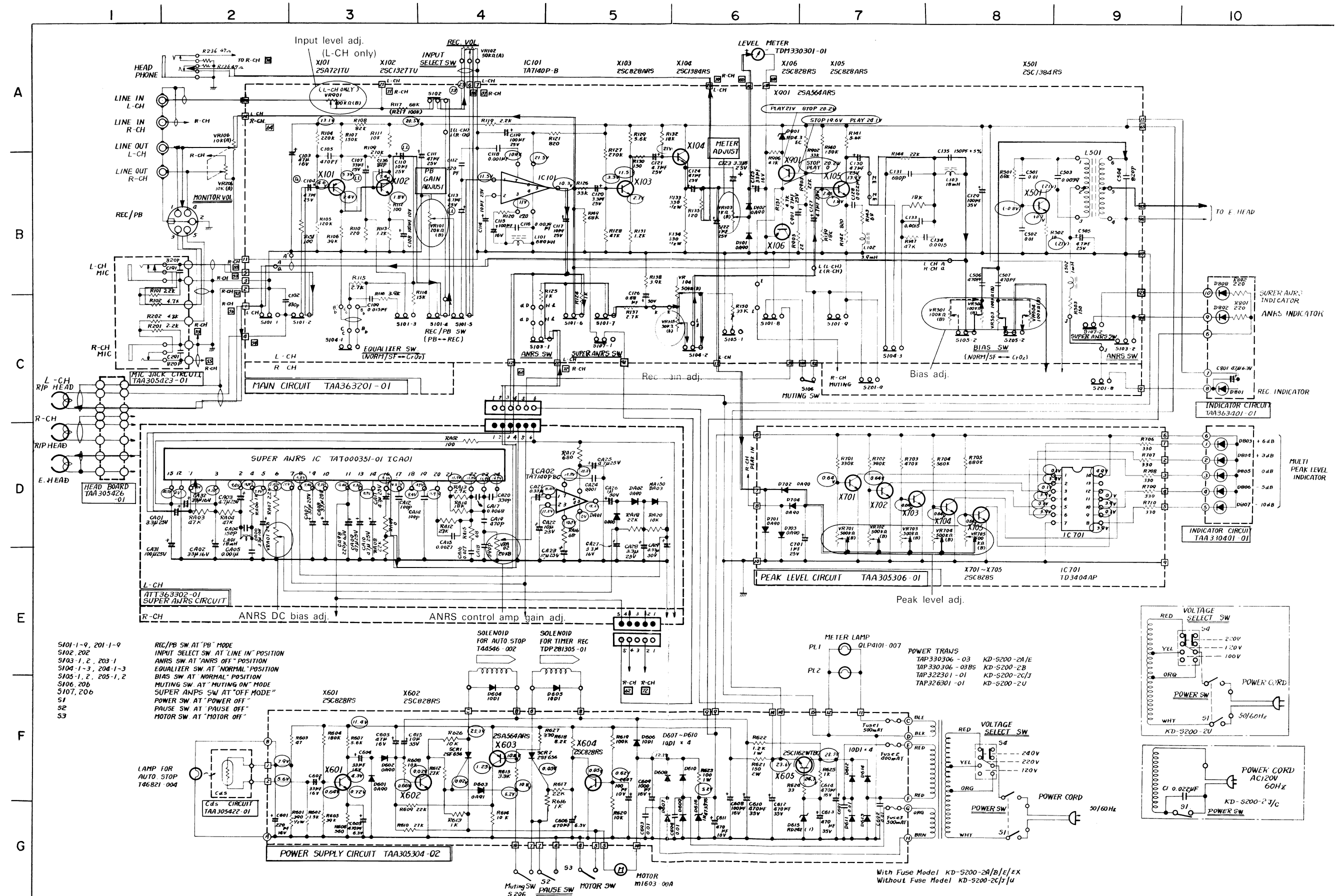
Colour code are show below.

- 1 ..... Brown
- 2 ..... Red
- 3 ..... Orange
- 4 ..... Yellow
- 5 ..... Green
- 6 ..... Blue
- 7 ..... Violet
- 8 ..... Grey
- 9 ..... White
- 0 ..... Black

KD-S200-2 A/B/E/U



## Standard Schematic Diagram of KD-S200-2





**[Variable resistors]**

|                           |                              |
|---------------------------|------------------------------|
| VR101, 201                | Playback gain adj.           |
| VR102, 202                | REC volume                   |
| VR103, 203                | VU meter gain adj.           |
| VR104, 204                | REC gain adj. (chrome)       |
| VR105, 205                | " (normal)                   |
| VR106, 206                | Output level control         |
| VR301, 401                | ANRS DC bias adj.            |
| VR302, 402                | ANRS control amp gain adj.   |
| VR501                     | Left bias adj. (normal)      |
| VR502                     | " (chrome)                   |
| VR503                     | Right bias adj. (normal)     |
| VR504                     | " (chrome)                   |
| VR701, 702, 703, 704, 705 | Peak level adj.              |
| VR901                     | Input level adj. (L ch only) |
| VRA01, B01                | ANRS DC bias adj.            |
| VRA02, B02                | ANRS control amp gain adj.   |

**[Switches]**

|                     |                                  |
|---------------------|----------------------------------|
| S101-1-9            | REC/PB switch                    |
| S201-1-9            | (at "Playback" mode)             |
| S102, 202           | Input select switch              |
|                     | (at "LINE IN" mode)              |
| S103-1, 203-1       | ANRS switch                      |
|                     | (at "ANRS OFF" mode)             |
| S104-1-3,           | Equalizer switch                 |
| S204-1-3            | (at "Normal" mode)               |
| S105-1, 2, 205-1, 2 | Bias switch                      |
|                     | (at "Normal" mode)               |
| S106, 206           | Muting switch                    |
|                     | (at "Muting on" mode)            |
| S1                  | Power switch (at "OFF" mode)     |
| S2                  | Pause switch (at "OFF" mode)     |
| S3                  | Motor switch (at "OFF" mode)     |
| S107-1, 203-1       | Super ANRS switch (at "OFF mode) |

**[Transistors]**

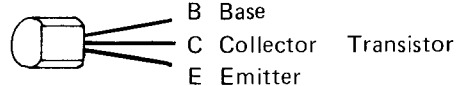
|            |                 |                          |
|------------|-----------------|--------------------------|
| X101, 201  | 2SA721TU        | Main amp.<br>C.board     |
| X102, 202  | 2SC1327TU       |                          |
| X103, 203  | 2SC828ARS       |                          |
| X105, 205  | 2SC828ARS       |                          |
| X106, 206  | 2SC828RS        |                          |
| X501       | 2SC828ARS       |                          |
| X901       | 2SA564ARS       | Peak level C. board.     |
| X902       | 2SC828ARS       |                          |
| X701-705   | 2SC828S . . . . |                          |
| X601, 602  | 2SC828RS        |                          |
| X603       | 2SA564ARS       |                          |
| X604       | 2SC828RS        |                          |
| X605       | 2SC1162WTBC     | Power supply<br>C. board |
| SCR1, SCR2 | 2SF656          |                          |

**[IC]**

|            |                   |                        |
|------------|-------------------|------------------------|
| IC101, 201 | TA7140P-B . . . . | Main amp.<br>C. board  |
| IC301      | TAT000351-01      | Super ANRS<br>C. board |
| IC302      | TA7140P-BC        |                        |
| IC701      | TD3404AP . . . .  | Peak level<br>C. board |

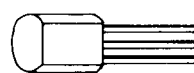
**[Diodes]**

|  |                |                          |
|--|----------------|--------------------------|
| D101, 102  | 0A90           | Main amp.<br>C. board    |
| D901   | RD4.3EC        |                          |
| DA03   | 1S2076A        | ANRS<br>C. board         |
| DA01, 02   | 1S188FM        |                          |
| D701, 702, 703, 704                                    | 0A90 . . . . . | Peak level C. board      |
| D601, 602  | 0A90           | Power supply<br>C. board |
| D603   | 0A91           |                          |
| D604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614 | 10D1           |                          |
| D615   | RD24E          |                          |
| D616   | 1N4733T5       |                          |
|  |                |                          |



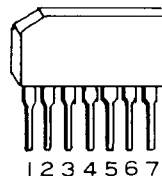
B Base  
C Collector  
E Emitter

Transistor



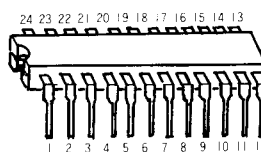
K Cathode  
A Anode  
G Gate

Thyristor 2SF656



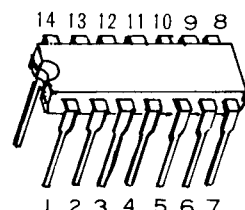
1 2 3 4 5 6 7

IC TA7140P-B



1 2 3 4 5 6 7 8 9 10 11 12

IC TAT000351-01

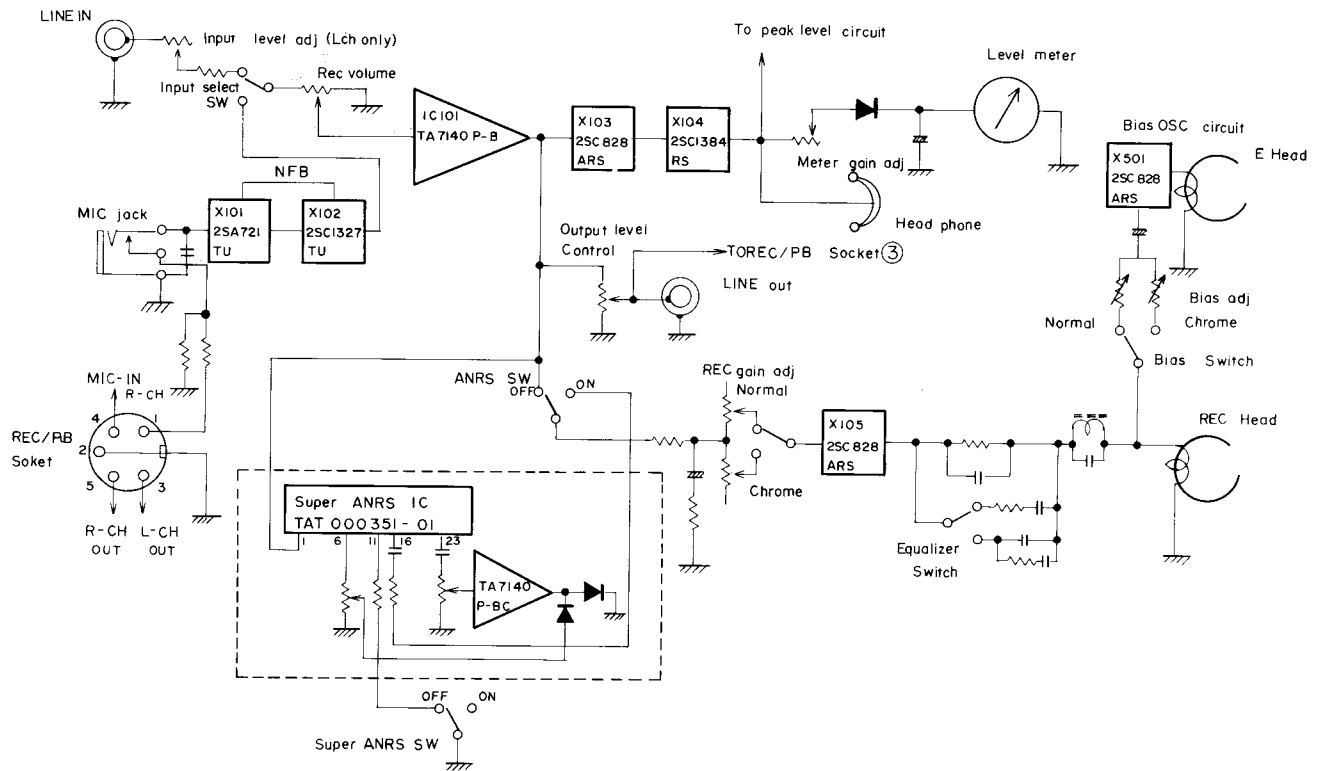


1 2 3 4 5 6 7

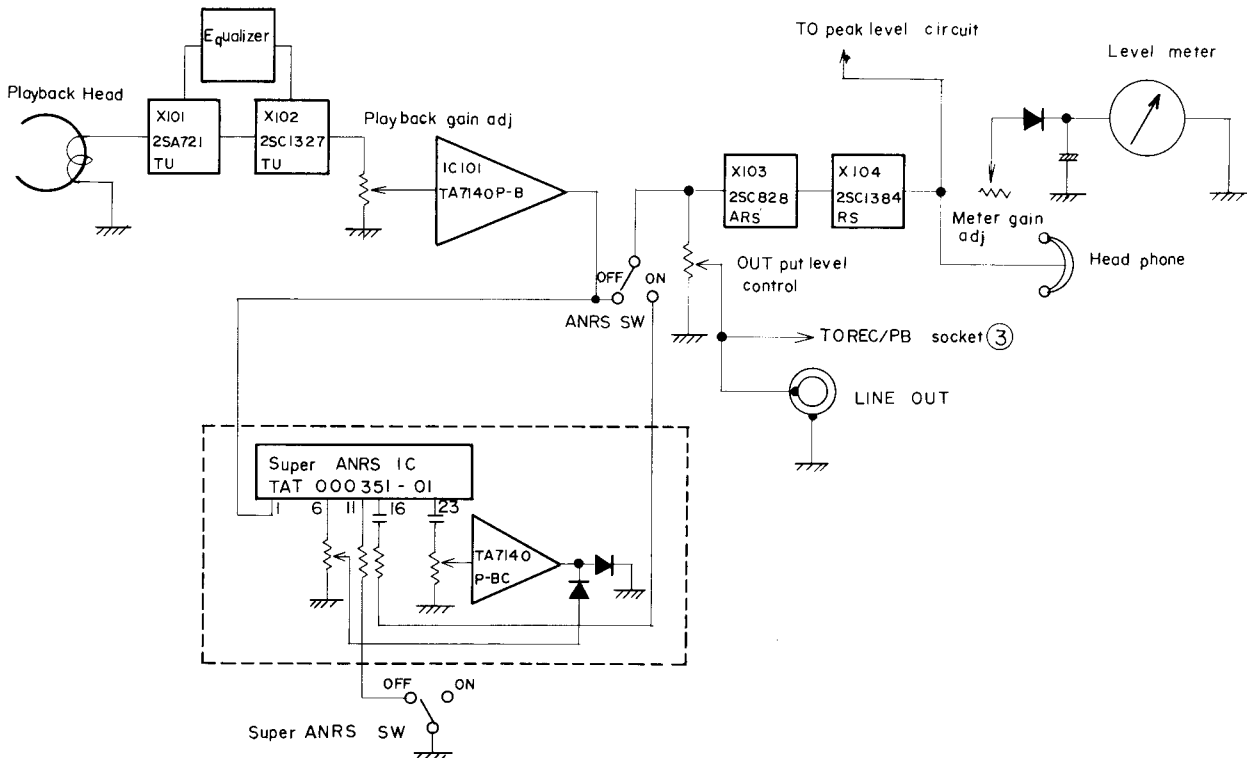
IC TD3404AP

# Block Diagram

## Recording system



## Playback system



# Circuit Board Parts

## Main Amp Circuit Board

All voltages are measured by DC V.T.V.M. without input signal at playback.

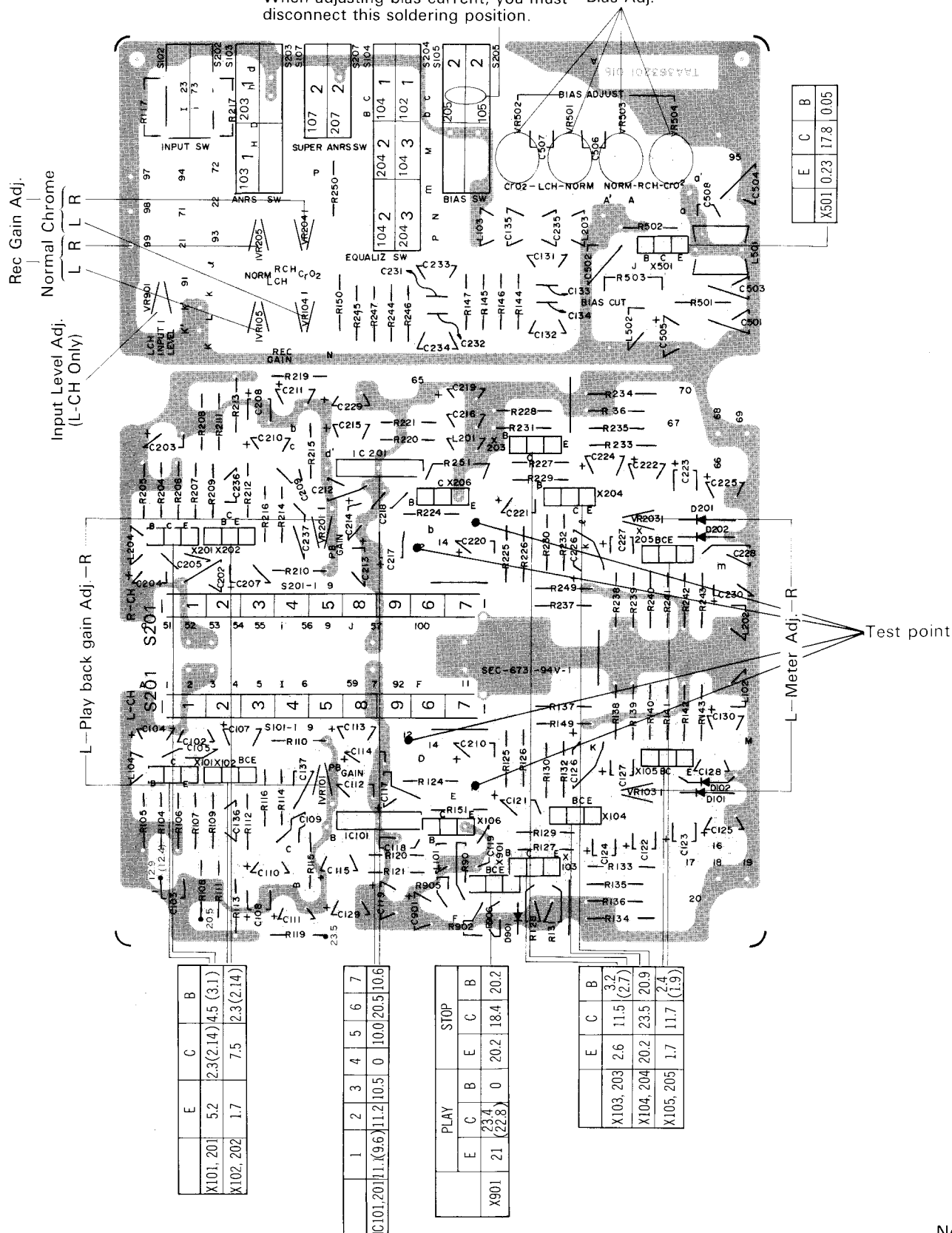
( ) voltages means by circuit tester.

When you measure the voltage by tester, we recommend you to use 20 k $\Omega$ /V impedance tester.

Bias Cut

When adjusting bias current, you must disconnect this soldering position.

Bias Adj.



## Main Amp Circuit Board Parts List

| Ref. No.                      | Parts No.    | Parts Name              | Remarks                        | Q'ty |
|-------------------------------|--------------|-------------------------|--------------------------------|------|
| R104, 204                     | TAA363201-01 | Circuit Board           | for Main Amp.                  | 1    |
| R105, 205                     | QRD141K-224  | C. Resistor             | 220 k $\Omega$ $\frac{1}{4}$ W | 2    |
| R106, 206                     | " -124       | "                       | 120 k $\Omega$ "               | 2    |
| R107, 207, 140, 240           | " -393       | "                       | 39 k $\Omega$ "                | 2    |
|                               | " -154       | "                       | 150 k $\Omega$ "               | 4    |
| R108, 208                     | " -823       | "                       | 82 k $\Omega$ "                | 2    |
| R109, 209, 127, 227,          | " -274       | "                       | 270 k $\Omega$ "               | 4    |
| R110, 210, 120, 220           | " -221       | "                       | 220 $\Omega$ "                 | 4    |
| R111, 211                     | " -103       | "                       | 10 k $\Omega$ "                | 2    |
| R112, 212                     | " -101       | "                       | 100 $\Omega$ "                 | 2    |
| R113, 213                     | " -122       | "                       | 1.2 k $\Omega$ "               | 3    |
| R114, 214                     | " -153       | "                       | 15 k $\Omega$ "                | 2    |
| R115, 215, 137, 237           | " -272       | "                       | 2.7 k $\Omega$ "               | 4    |
| R116, 216, 138, 238           | " -392       | "                       | 3.9 k $\Omega$ "               | 4    |
| R117                          | QRD142K-683  | "                       | 68 k $\Omega$ "                | 1    |
| R217                          | " -104       | "                       | 100 k $\Omega$ "               | 1    |
| R119, 219                     | QRD141K-222  | "                       | 2.2 k $\Omega$ "               | 2    |
| R121, 221                     | QRD146K-821  | "                       | 820 $\Omega$ "                 | 2    |
| R124, 224, 125, 225           | QRD141K-102  | "                       | 1 k $\Omega$ "                 | 4    |
| R126, 226, 150, 250           | " -333       | "                       | 33 k $\Omega$ "                | 4    |
| R128                          | QRD143K-473  | "                       | 47 k $\Omega$ "                | 1    |
| R228                          | QRD141K-473  | "                       | 47 k $\Omega$ "                | 1    |
| R129, 229                     | " -562       | "                       | 5.6 k $\Omega$ "               | 2    |
| R130, 230                     | " -151       | "                       | 150 $\Omega$ "                 | 2    |
| R131                          | QRD143K-122  | "                       | 1.2 k $\Omega$ "               | 1    |
| R132, 232, 139, 239, 146, 246 | QRD141K-183  | "                       | 18 k $\Omega$ "                | 6    |
| R135, 235                     | " -121       | "                       | 120 $\Omega$ "                 | 2    |
| R136, 236                     | QRD143K-470  | "                       | 47 $\Omega$ "                  | 2    |
| R141, 241                     | QRD141K-562  | "                       | 5.6 k $\Omega$ "               | 2    |
| R142, 242                     | " -821       | "                       | 820 $\Omega$ "                 | 2    |
| R143, 243                     | " -680       | "                       | 68 $\Omega$ "                  | 2    |
| R144, 244                     | " -223       | "                       | 22 k $\Omega$ "                | 2    |
| R147, 247                     | QRD141K-473  | C. Resistor             | 47 k $\Omega$ $\frac{1}{4}$ W  | 2    |
| R149, 249, 150, 250, 501      | " -683       | "                       | 68 k $\Omega$ "                | 5    |
| R902                          | QRD143K-333  | "                       | 33 k $\Omega$ "                | 1    |
| R903                          | " -223       | "                       | 22 k $\Omega$ "                | 1    |
| R905                          | " -220       | "                       | 22 $\Omega$ "                  | 1    |
| R906                          | " -472       | "                       | 4.7 k $\Omega$ "               | 1    |
| R151, 251                     | QRD141K-472  | "                       | 4.7 k $\Omega$ "               | 2    |
| R152, 252                     | QRD143K-101  | C. Resistor             | 100 $\Omega$ $\frac{1}{4}$ W   | 2    |
| R133, 233, 134, 234           | QRD121K-331  | "                       | 330 $\Omega$ $\frac{1}{2}$ W   | 4    |
| R502                          | QRD146K-100  | "                       | 10 $\Omega$ $\frac{1}{4}$ W    | 1    |
| R503                          | " -151       | "                       | 150 $\Omega$ "                 | 1    |
| C102, 202, 105, 205           | QCS11HK-471  | Fixed C. Capacitor      | 470 pF DC 50 V                 | 2    |
| C103, 203                     | QEB41EM-476  | E. Capacitor (Low Leak) | 47 $\mu$ F 25 V                | 2    |
| C104, 204                     | QEE41EM-475  | " (Tantal)              | 4.7 $\mu$ F "                  | 2    |
| C107, 207                     | QEB41EM-336  | " (Low Leak)            | 33 $\mu$ F "                   | 2    |
| C108, 208                     | QEW41AA-107  | E. Capacitor            | 100 $\mu$ F 10 V               | 2    |
| C109, 209                     | QFM41HJ-153  | Mylar Capacitor         | 0.015 $\mu$ F 50 V             | 2    |
| C110, 210                     | QEW41EA-106  | E. Capacitor            | 10 $\mu$ F 25 V                | 2    |
| C112, 212                     | QCS11HK-221  | Fixed C. Capacitor      | 220 pF 50 V                    | 2    |
| C113, 213                     | QEB41EM-475  | E. Capacitor (Low Leak) | 4.7 $\mu$ F 25 V               | 2    |
| C114, 214                     | QEW41EA-106  | E. Capacitor            | 10 $\mu$ F 25 V                | 2    |
| C115, 215                     | QEW41CA-107  | "                       | 100 $\mu$ F 16 V               | 2    |

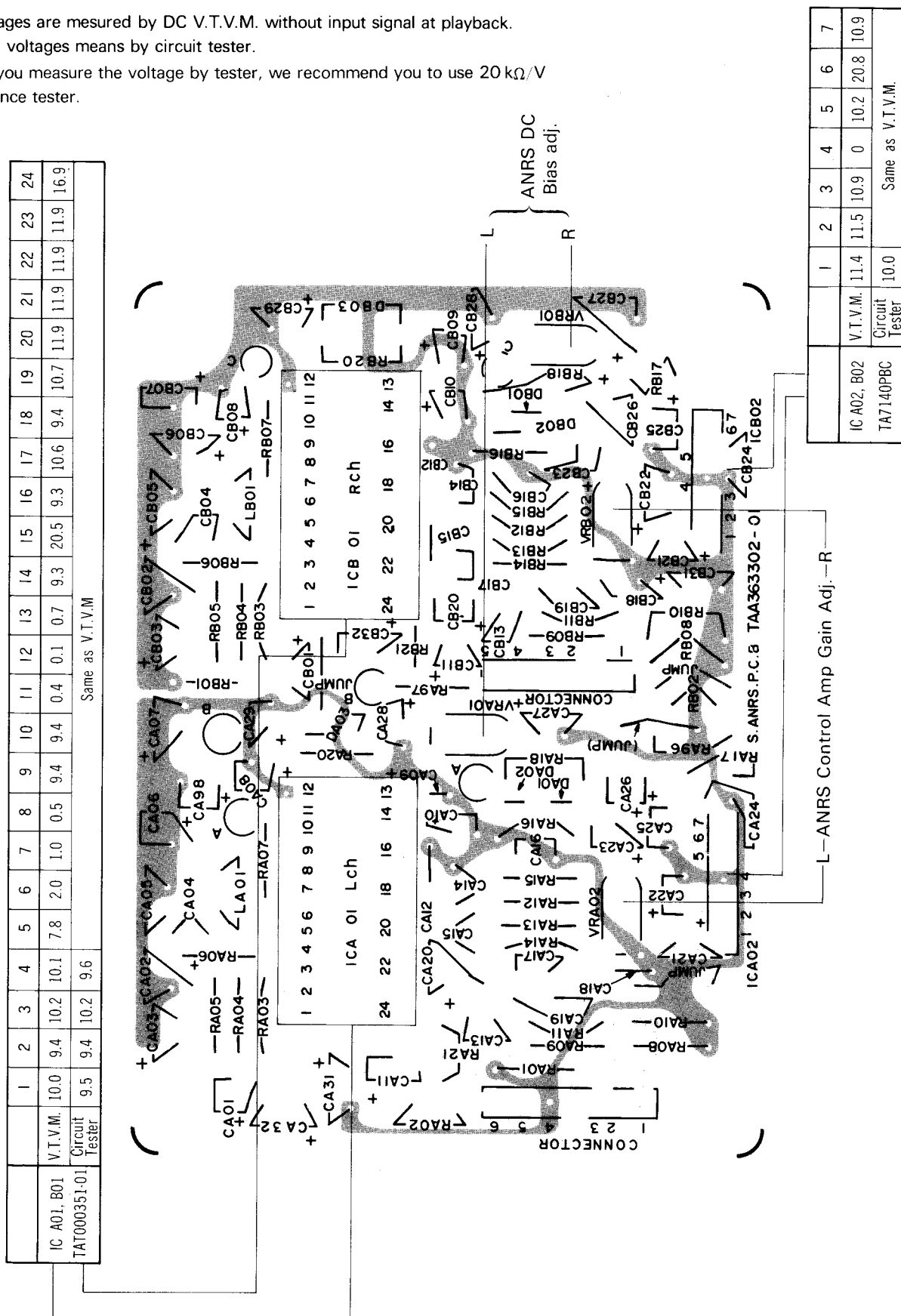
| Ref. No.   | Parts No.    | Parts Name           | Remarks             | Q'ty |
|--|--------------|----------------------|---------------------|------|
| C116, 216  | QFM41HJ-392  | Mylar Capacitor      | 0.0039 $\mu$ F 50 V | 2    |
| C117, 217  | QEW41EA-106  | E. Capacitor         | 10 $\mu$ F 25 V     | 2    |
| C118, 218  | QFM41HK-182  | Mylar Capacitor      | 0.0018 $\mu$ F 50 V | 2    |
| C120, 220  | QEW41EA-335  | E. Capacitor         | 3.3 $\mu$ F 25 V    | 2    |
| C121,221,127,227,<br>130,230,505,901   | QEW41EA-475  | "                    | 4.7 $\mu$ F 25 V    | 8    |
| C122, 222  | " -105       | "                    | 1 $\mu$ F 25 V      | 2    |
| C123,223   | " -335       | "                    | 3.3 $\mu$ F "       | 2    |
| C125, 225  | QEW41CA-336  | "                    | 3.3 $\mu$ F 16 V    | 2    |
| C126, 226  | QEB41HM-684M | " (Low Leak)         | 0.68 $\mu$ F 50 V   | 2    |
| C128, 228  | QFM41HJ-223  | Mylar Capacitor      | 0.022 $\mu$ F "     | 2    |
| C131, 231  | QCS11HK-681  | Fixed C. Capacitor   | 680 pF "            | 2    |
| C134, 234, 133, 233  | QFM41HK-152  | Mylar Capacitor      | 0.0015 $\mu$ F "    | 4    |
| C135, 235  | QCS11HJ-151  | Fixed C. Capacitor   | 150 pF "            | 2    |
| C136, 236  | QCS11HK-820  | "                    | 82 pF "             | 2    |
| C137, 237, 102, 202  | " -331       | "                    | 330 pF "            | 4    |
| C501, 502  | QFM42AK-103  | Mylar Capacitor      | 0.01 $\mu$ F 10 V   | 2    |
| C503   | " -392       | "                    | 0.0039 $\mu$ F "    | 1    |
| C504   | QFS42BK-821  | Polystyrol Capacitor | 820 pF              | 1    |
| C506, 507  | QFS42BK-471  | "                    | 470 pF              | 2    |
| C111,211,124,224   | QEW41EA-476  | E. Capacitor         | 47 $\mu$ F 25 V     | 4    |
| C119, 219  | " -107       | "                    | 100 $\mu$ F "       | 2    |
| C129, 229  | QEW41VA-107M | "                    | 100 $\mu$ F 35 V    | 2    |
| VR101, 201   | QVP8A0B-024  | V. Resistor          | 20 k $\Omega$       | 2    |
| VR103, 203   | " -023       | "                    | 2 k $\Omega$        | 2    |
| VR104,204,105,205  | " -054       | "                    | 50 k $\Omega$       | 4    |
| VR901  | " -015       | "                    | 100 k $\Omega$      | 1    |
| VR501,502,503,504  | QVP4A0B-104  | V. Resistor          |                     | 4    |
| L101, 201  | TAC000324-06 | Inductor             | 680 $\mu$ H         | 2    |
| L102, 202  | " -08        | "                    | 3.9 mH              | 2    |
| L103, 203  | " -01        | "                    | 18 mH               | 2    |
| L502   | " -03        | "                    | 1 mH                | 1    |
| L501   | TAB345518-01 | Osc. Coil            |                     | 1    |
| S101(1-9),201(1-9)   | QSS9201-001  | Slide Switch         |                     | 2    |
| S102,202,103(1,2),203-1,<br>107(1,2),104(1-3),204<br>(1-3),207(1,2),105(1,<br>2), 205(1,2) | OSP0259-001  | Push SW. Ass'y       |                     | 1    |
| D901   | RD4.3EC      | Zener Diode          |                     | 1    |
| X101, 201  | 2SA721TU     | Si. Transistor       |                     | 2    |
| X102, 202  | 2SC1327TU    | "                    |                     | 2    |
| X103, 203, 105, 205  | 2SC828ARS    | "                    |                     | 4    |
| X501, 104, 204,  | 2SC1384RS    | "                    |                     | 3    |
| X106, 206  | 2SC828RS     | "                    |                     | 2    |
| X901   | 2SA954ARS    | "                    |                     | 1    |
| D102, 202  | 0A90         | Ge. Diode            |                     | 2    |
| IC101, 201   | TA7140PB     | Integrated Circuit   |                     | 2    |
|  | E43727-002   | Tab                  |                     | 44   |
|  | TAS356406-02 | Shield Plate         |                     | 1    |

## Supper ANRS Circuit Board

All voltages are measured by DC V.T.V.M. without input signal at playback.

( ) voltages means by circuit tester.

When you measure the voltage by tester, we recommend you to use 20 k $\Omega$ /V impedance tester.



## Super ANRS Circuit Board Parts List

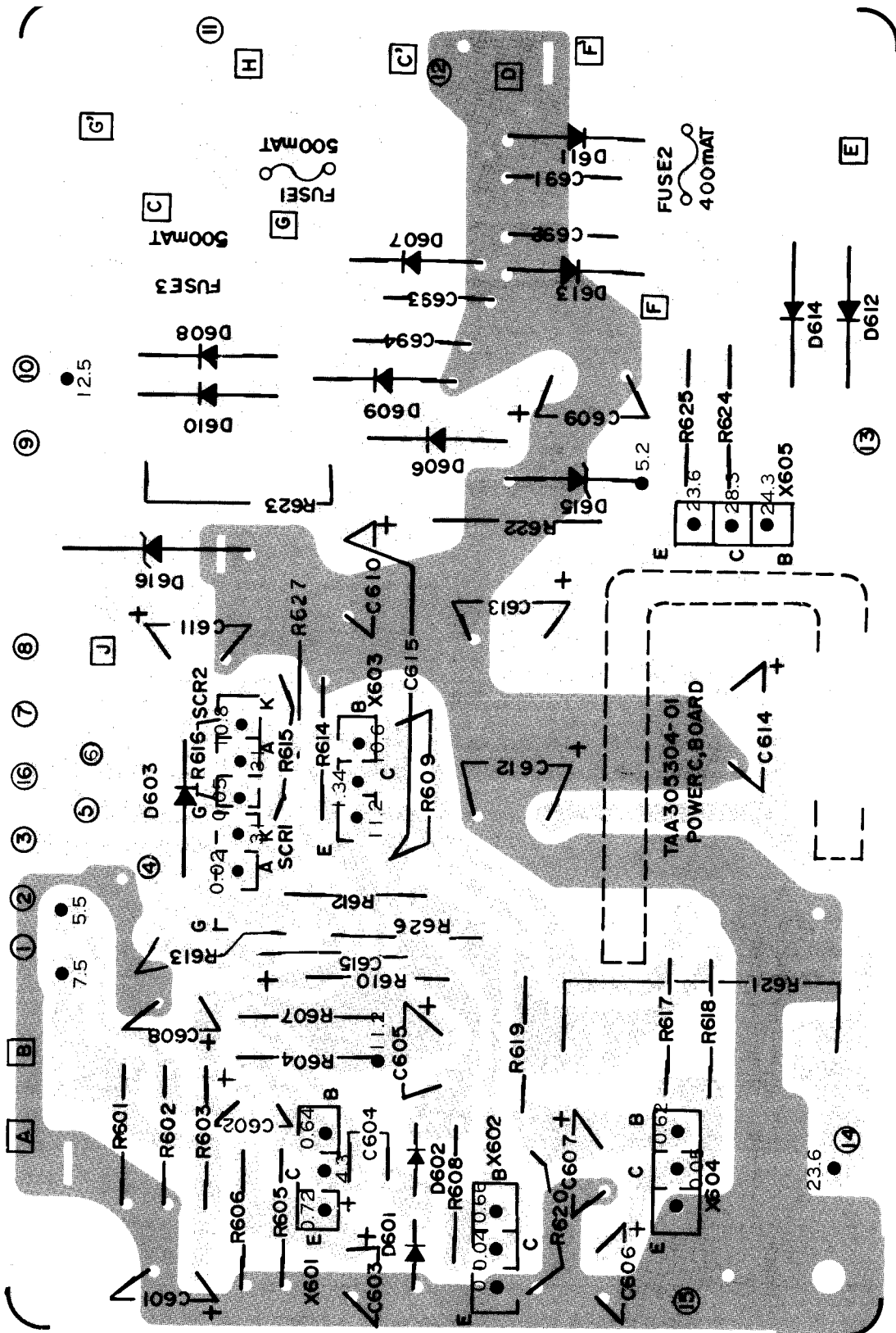
| Ref. No.              | Parts No.     | Parts Name              | Remarks             | Q'ty |
|-----------------------|---------------|-------------------------|---------------------|------|
| RA01, B01             | *TAA363302-01 | Circuit Board           |                     | 1    |
| RA02, B02             | QRD181J-223   | C. Resistor             | 22 k $\Omega$       | 2    |
| RA03,B03,A96,A04,B04  | QRD146K-181   | "                       | 180 $\Omega$ 1/4 W  | 2    |
| RA05, B05             | QRD181J-473   | "                       | 47 k $\Omega$ 1/8 W | 5    |
|                       | " -562        | "                       | 5.6 k $\Omega$ "    | 2    |
| RA06, B06,            | " -102        | "                       | 1 k $\Omega$ "      | 2    |
| RA07, B07             | " -222        | "                       | 2.2 k $\Omega$ "    | 2    |
| RA08,B08,A18,B18      | " -223        | "                       | 22 k $\Omega$ "     | 4    |
| RA12,B12,A13,B13      | " -272        | "                       | 2.7 k $\Omega$ "    | 4    |
| RA14, B14             | " -183        | "                       | 18 k $\Omega$ "     | 2    |
| RA15, B15             | " -680        | "                       | 68 $\Omega$ "       | 2    |
| RA16, B16             | " -390        | "                       | 39 $\Omega$ "       | 2    |
| RA17, B17             | QRD146K-681   | "                       | 680 $\Omega$ 1/4 W  | 2    |
| RA20, B20             | QRD181J-103   | "                       | 10 k $\Omega$ 1/8 W | 2    |
| RA97                  | QRD181J-471   | "                       | 470 $\Omega$ 1/8 W  | 1    |
| CA01, B01             | QWY123-040    | Bus Wire                | for Jump            | 6    |
| CA02,B02,A06,B06,A09, | QEW41EA-105   | E. Capacitor            | 1 $\mu$ F 25 V      | 2    |
| B09,A10,B10,A27,B27,  | QEW41CA-336   | "                       | 33 $\mu$ F 16 V     | 12   |
| A32,B32               |               |                         |                     |      |
| CA03,B03,A11,B11      | QEW41EA-475   | "                       | 4.7 $\mu$ F 25 V    | 4    |
| CA04, B04             | QCS11HK-151   | Fixed C. Capacitor      | 150 pF 50 V         | 2    |
| CA05,B05              | QCY41HK-102   | "                       | 0.001 $\mu$ F 50 V  | 2    |
| CA07,B07,A08,B08      | QEW41CA-336   | E. Capacitor            | 33 $\mu$ F 16 V     | 4    |
| CA12,B12,A14,B14      | QCS11HK-101   | Fixed C. Capacitor      | 100 pF 50 V         | 4    |
| CA15, B15             | QFM41HJ-272   | Mylar Capacitor         | 0.0027 $\mu$ F 50 V | 2    |
| CA16, B16             | " -273        | "                       | 0.027 $\mu$ F 50 V  | 2    |
| CA17, B17             | " -682        | "                       | 0.0068 $\mu$ F 50 V | 2    |
| CA18, B18             | QCS11HK-391   | Fixed C. Capacitor      | 390 pF 50 V         | 2    |
| CA19, B19             | " -471        | "                       | 470 pF 50 V         | 2    |
| CA20, B20             | " -331        | "                       | 330 pF 50 V         | 2    |
| CA21,B21,A29,B29      | QEB41HM-334M  | E. Capacitor (Low Leak) | 0.33 $\mu$ F 50 V   | 4    |
| CA22,B22,A23,B23      | QEW41EA-106   | E. Capacitor            | 10 $\mu$ F 25 V     | 4    |
| CA24, B24             | QFM41HK-102   | Mylar Capacitor         | 0.001 $\mu$ F 50 V  | 2    |
| CA25, B25             | QEW41EA-476   | E. Capacitor            | 47 $\mu$ F 25 V     | 2    |
| CA26, B26             | " -105        | "                       | 1 $\mu$ F 25 V      | 2    |
| CA28, B28             | " -335        | "                       | 3.3 $\mu$ F 25 V    | 2    |
| CA31, B31             | " -107        | "                       | 100 $\mu$ F 25 V    | 2    |
| CA98                  | QEW40JA-227   | "                       | 220 $\mu$ F         | 1    |
| VRA01, B01            | QVP8A0B-023   | V. Resistor             | 2 k $\Omega$        | 2    |
| VRA02, B02            | " -024        | "                       | 20 k $\Omega$       | 2    |
| LA01, B01             | TAC000324-01  | Inductor                | 18 mH               | 2    |
| DA01,B01,A02,B02      | 0A90          | Ge. Diode               |                     | 4    |
| DA03, B03             | MA150         | Si. Diode               |                     | 2    |
| ICA02, B02            | TA7140PBC     | Integrated Circuit      |                     | 2    |
| ICA01, B01            | TAT000351-01  | "                       | Super ANRS          | 2    |
|                       | QMC0527-001   | Plug Ass'y              |                     | 1    |
|                       | QMC0627-001   | "                       |                     | 1    |

## Power Supply Circuit Board

Red print is shown the voltage (V) of playback mode.

( ) voltages means by circuit tester.

When you measure the voltage by tester, we recommend you to use 20 k $\Omega$ /V impedance tester.





## Power Supply Circuit Board Parts List

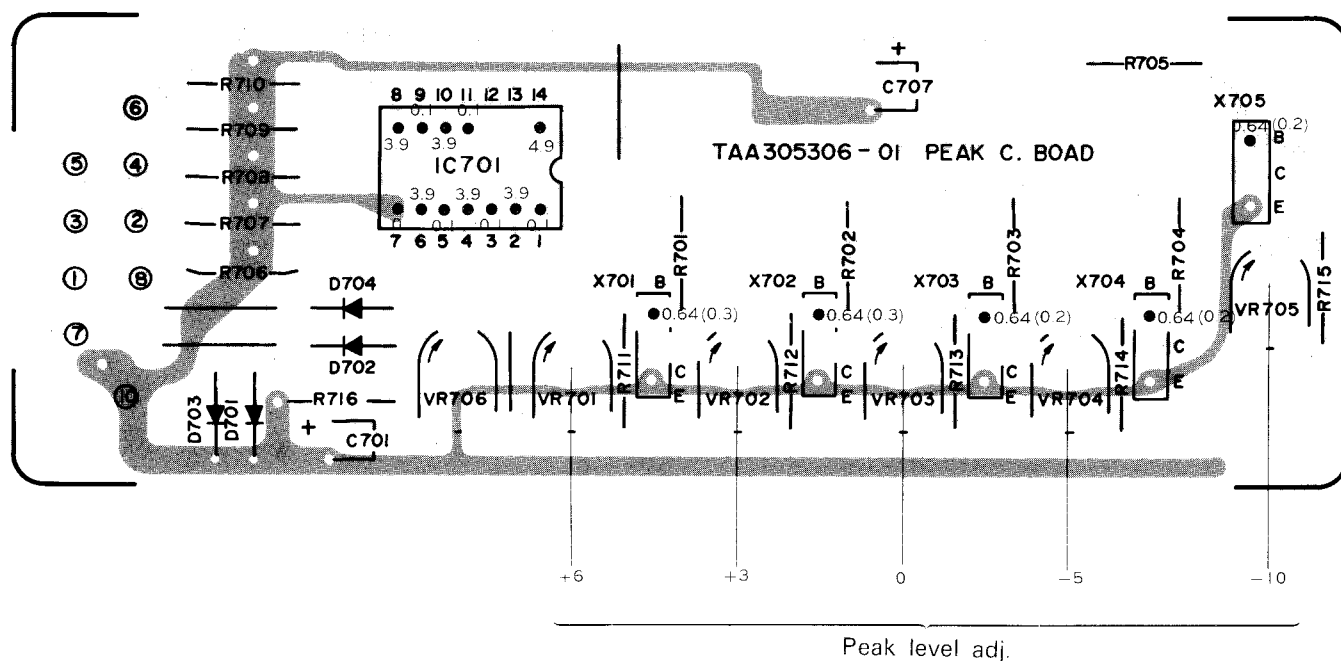
| Ref. No.            | Parts No.      | Parts Name         | Remarks                        | Q'ty |
|---------------------|----------------|--------------------|--------------------------------|------|
| R601                | TAA-305304-03  | Circuit Board      | for Power Supply               | 1    |
| R602                | QRD121K-391    | C. Resistor        | 390 $\Omega$ $\frac{1}{2}$ W   | 1    |
| R603                | QRD142K-152    | "                  | 1.5 k $\Omega$ $\frac{1}{4}$ W | 1    |
| R604                | QRD146K-330    | "                  | 33 $\Omega$ "                  | 1    |
|                     | QRD142K-184    | "                  | 180 k $\Omega$ "               | 1    |
| R605                | " -393         | "                  | 39 k $\Omega$ "                | 1    |
| R606                | " -561         | "                  | 560 $\Omega$ "                 | 1    |
| R607, 618           | " -562         | "                  | 5.6 k $\Omega$ "               | 2    |
| R608, 614, 620, 626 | " -103         | "                  | 10 k $\Omega$ "                | 4    |
| R609                | " -223         | "                  | 22 k $\Omega$ "                | 1    |
| R610                | " -273         | "                  | 27 k $\Omega$ "                | 1    |
| R612                | " -272         | "                  | 2.7 k $\Omega$ "               | 1    |
| R613                | " -102         | "                  | 1 k $\Omega$ "                 | 1    |
| R615                | QRD142K-332    | C. Resistor        | 3.3 k $\Omega$ $\frac{1}{4}$ W | 1    |
| R616                | QRD143K-102    | "                  | 1 k $\Omega$ "                 | 1    |
| R617                | " -222         | "                  | 2.2 k $\Omega$ "               | 1    |
| R619                | " -104         | "                  | 100 k $\Omega$ "               | 1    |
| R621                | ORG026J-151    | OMF Resistor       | 150 pF                         | 1    |
| R622                | ORG016J-122    | "                  | 0.0012 pF                      | 1    |
| R623                | " -101         | "                  | 100 pF                         | 1    |
| R624                | QRD146K-330    | C. Resistor        | 33 $\mu$ F $\frac{1}{4}$ W     | 1    |
| R625                | " -102         | "                  | 1 k $\Omega$ "                 | 1    |
| R627                | QRD143K-331    | "                  | 330 $\Omega$ "                 | 1    |
| C601                | QEW41CA-227    | E. Capacitor       | 220 $\mu$ F 16 V               | 1    |
| C602, 604           | " -336         | "                  | 33 $\mu$ F "                   | 2    |
| C603, 606           | QEW40JA-477    | "                  | 470 $\mu$ F 6.3 V              | 2    |
| C605                | QEW41CA-476    | "                  | 47 $\mu$ F 16 V                | 1    |
| C607                | QEW41AA-107    | "                  | 100 $\mu$ F 10 V               | 1    |
| C608                | QEW41CA-107    | "                  | 100 $\mu$ F 16 V               | 1    |
| C609                | " -108         | "                  | 1000 $\mu$ F 16 V              | 1    |
| C610, 612, 613, 614 | QEW41VA-477    | "                  | 470 $\mu$ F 35 V               | 4    |
| C611                | QEW41AA-477    | "                  | 470 $\mu$ F 10 V               | 1    |
| C615                | QEW41VA-106    | "                  | 10 $\mu$ F 35 V                | 1    |
| C691, 692, 693, 694 | QCF12HP-103    | Fixed C. Capacitor | 0.01 $\mu$ F                   | 4    |
|                     | A43596-001     | Tab                | "                              | 4    |
|                     | E43727-002     | "                  | "                              | 15   |
| D603                | E40130-001     | Ge. Diode          |                                | 8    |
| X601, 602, 604      | 0A91           | Si. Transistor     |                                | 1    |
| X603                | 2SC828RS       | "                  |                                | 3    |
| X605                | 2SA564ARS      | "                  |                                | 1    |
|                     | 2SC1162WTBC    | "                  |                                | 1    |
| SCR1, 2             | 2SF656         | SCR                |                                | 2    |
| D615                | RD24E(1)       | Zener Diode        |                                | 1    |
| D616                | 1N4733T5       | "                  |                                | 1    |
| D601, 602           | 0A90           | Ge. Diode          |                                | 2    |
| D606-614            | T30155-001     | Si. Diode          |                                | 9    |
|                     | TAZ000331-02BS | Fuse Holder        | KD-S200-2A/B/E/U               | 6    |
|                     | QMF51A2-R50    | Fuse               | 500 mA, KD-S200-2A/E/U         | 1    |
|                     | QMF51A2-R50LBS | "                  | 500 mA, KD-S200-2B             | 1    |
|                     | QMF51A2-R40    | "                  | 400 mA, KD-S200-2A/E           | 1    |
|                     | QMF51A2-R40LBS | "                  | 400 mA, KD-S200-2B             | 1    |
|                     | QMF51A2-R50    | "                  | 500 mA, KD-S200-2A/E           | 1    |
|                     | QMF51A2-R50LBS | "                  | 500 mA, KD-S200-2B             | 1    |
|                     | TAR272448-01   | Heat Sink          |                                | 1    |
|                     | LPSP3008ZS     | Screw              | for X605                       | 1    |

## Peak Level Circuit Board

Red print is shown the voltage (V) of playback mode.

( ) voltages means by circuit tester.

When you measure the voltage by tester, we recommend you to use 20 k $\Omega$ /V impedance tester.

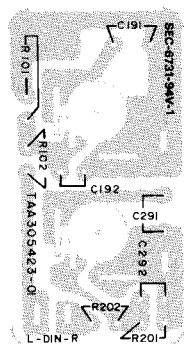


### Peak Level Circuit Board Parts List

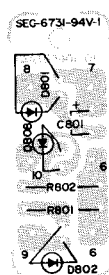
| Ref. No.              | Parts No.    | Parts Name         | Remarks            | Q'ty |
|-----------------------|--------------|--------------------|--------------------|------|
| R701                  | TAA305306-01 | Circuit Board      | for Peak           | 1    |
| R702                  | QRD142K-334  | C. Resistor        | 330 k $\Omega$ ¼ W | 1    |
| R703                  | " -394       | "                  | 390 k $\Omega$ "   | 1    |
| R704                  | " -474       | "                  | 470 k $\Omega$ "   | 1    |
| R705                  | " -564       | "                  | 560 k $\Omega$ "   | 1    |
| R706,707,708,709,710  | " -684       | "                  | 680 k $\Omega$ "   | 1    |
| C701                  | QEWA1EA-105  | E. Capacitor       | 330 $\Omega$ "     | 5    |
| C707                  | QEWA1AA-227  | "                  | 1 $\mu$ F 25 V     | 1    |
| VR701,702,703,704,705 | QVP8A0B-055  | V. Resistor        | 500 k $\Omega$ (B) | 1    |
| D701,702,703,704      | 0A90         | Ge. Diode          |                    | 4    |
| X701,702,703,704,705  | 2SC828ST     | Si. Transistor     |                    | 5    |
| IC701                 | TD3404AP     | Integrated Circuit |                    | 1    |
|                       | E43727-002   | Tab                |                    | 9    |

## Other Circuit Board

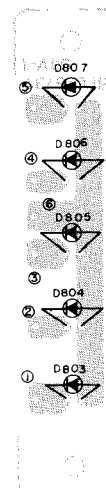
MIC Jack C. Board



Indicator C. Board



Peak Level Indicator C. Board



Head Wire C. Board



CdS C. Board



## Other Circuit Board Parts List

| Ref. No.             | Parts No.    | Parts Name              | Remarks                   | Q'ty  |
|----------------------|--------------|-------------------------|---------------------------|-------|
| (MIC Jack C. Board)  | TAA305423-01 | Circuit Board           | for MIC Jack              | 1     |
|                      | R101, 201    | C. Resistor             | 1.2 k $\Omega$ ¼ W        | 2     |
|                      | R102, 202    | "                       | 4.7 k $\Omega$ "          | 2     |
|                      | C191, 291    | Fixed Ceramic Capacitor | 820 pF                    | 2     |
|                      | E40516-001   | Tab                     |                           | 4     |
| (Indicator C. Board) | TAJ305307-02 | Jack Ass'y              | for MIC & Headphone       | 1 set |
|                      | TAA330401-01 | C. Board                | for Peak Level Indicator  | 1     |
|                      | TLR102       | LED                     |                           | 5     |
| (Indicator C. Board) | TER305427-01 | Spacer                  |                           | 5     |
|                      | TAA330402-01 | C. Board                | for Indicator (REC, ANRS) | 1     |
| D801                 | TLR102       | LED                     |                           | 1     |
| D802, 808            | TLG102       | LED                     |                           | 2     |
|                      | TER305427-01 | Spacer                  |                           | 3     |
| D801, 802            | QRD146K-221  | C. Resistor             | 220 $\Omega$ ¼ W          | 2     |
| C801                 | QEW40JA-476  | E. Capacitor            |                           | 1     |
| (Other C. Board)     | TAA305426-01 | Circuit Board           | for Headwire Terminal     | 1     |
|                      | TAA305422-01 | Circuit Board           | for CdS                   | 1     |
|                      | T45616-001   | CdS Photo-cell          |                           | 1     |
|                      | TAA305459-02 | Circuit Board           | for PIN                   | 1     |

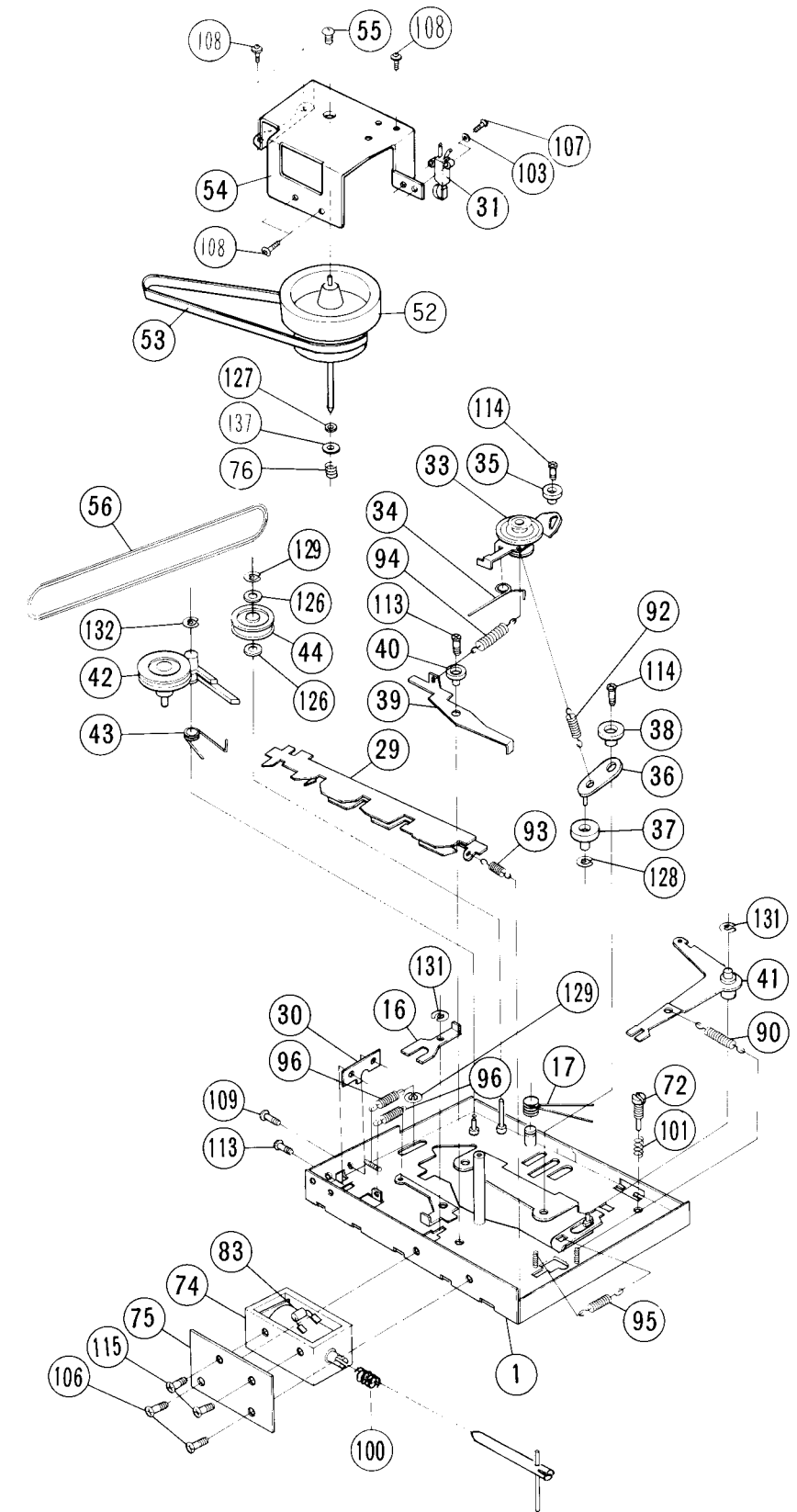
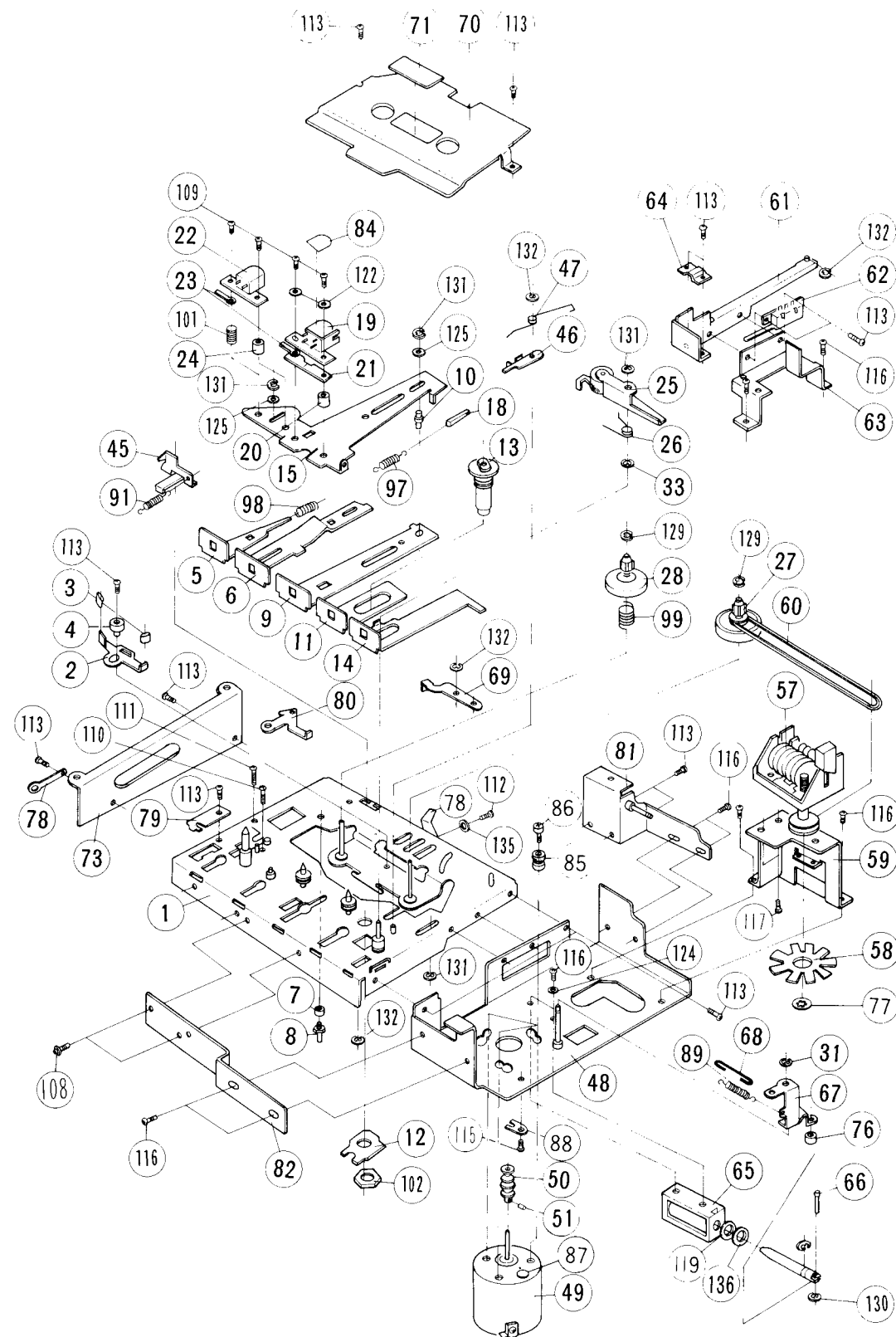
## Mechanical Component List

| Ref. No. | Parts No.     | Parts Name             | Remarks               | Q'ty |
|----------|---------------|------------------------|-----------------------|------|
| 1        | *TGB305205-0B | Chassis Base Ass'y     |                       | 1    |
| 2        | TFB265488-01  | Brake Arm              |                       | 1    |
| 3        | TER265487-01  | Brake Rubber           |                       | 2    |
| 4        | TFH265486-01  | Collar                 | for Brake Arm         | 1    |
| 5        | *T47449-00B   | Rew. Bar Ass'y         |                       | 1    |
| 6        | *T47453-00C   | Rec. Bar Ass'y         |                       | 1    |
| 7        | T30302-061    | Collar                 | for Rec. Bar          | 1    |
| 8        | TFH265516-01  | Stud                   | for Brake Lever       | 1    |
| 9        | *TGB265485-0B | Play Bar Ass'y         |                       | 1    |
| 10       | TFH265514-01  | Pin (Play Bar)         | Play Bar & Slide Base | 1    |
| 11       | *T47459-00B   | FF Bar Ass'y           |                       | 1    |
| 12       | *TFB305417-01 | Spacer                 |                       | 1    |
| 13       | *TGH265546-0C | Capstan Metal Ass'y    |                       | 1    |
| 14       | TGB291420-0A  | Stop Bar Ass'y         |                       | 1    |
| 15       | *TGB265482-0C | Slide Base Ass'y       |                       | 1    |
| 16       | TEP014497-01  | Spring Plate           |                       | 1    |
| 17       | TFW014498-01  | Spring                 | for Play Bar          | 1    |
| 18       | TJN265559-01  | Silencer               | for Spring            | 1    |
| 19       | ZMM074401-0A  | R.P. Head Ass'y        |                       | 1    |
| 20       | T30302-072    | R.P. Head Collar       |                       | 1    |
| 21       | TFP294513-01  | R.P. Head Spring       | R.P. Head             | 1    |
| 22       | THS000481-0A  | E. Head Ass'y          |                       | 1    |
| 23       | T45640-001    | Wire Holder            | Head Wire Clamp       | 2    |
| 24       | T30302-067    | E. Head Collar         |                       | 1    |
| 25       | TGB291415-0B  | Pinch Roller Arm Ass'y |                       | 1    |
| 26       | TFW294483-01  | Pinch Roller Spring    |                       | 1    |
| 27       | TGB294462-0B  | Take-up Disc Ass'y     |                       | 1    |
| 28       | *TGP294464-0D | Supply Disc Ass'y      |                       | 1    |
| 29       | TGB265475-0A  | Push Button Cam Ass'y  |                       | 1    |
| 30       | TFB265509-02  | Stopper                | for Push Button Cam   | 1    |
| 31       | QSMIS01-015   | Micro SW Ass'y         |                       | 1    |
| 32       | T47528-002    | Switch Lever           |                       | 1    |
| 33       | TGX294488-0A  | FF Arm Ass'y           |                       | 1    |
| 34       | T47507-001    | FF Spring              |                       | 1    |
| 35       | TFH305466-01  | Metal                  | FF Arm                | 1    |
| 36       | T47508-00A    | Rew. Arm Ass'y         |                       | 1    |
| 37       | T47500-001    | Idler Ass'y            |                       | 1    |
| 38       | TFH265534-01  | Metal                  | for Rew. Arm          | 1    |
| *39      | *TFB294478-02 | Review Lever           |                       | 1    |
| 40       | TFH000491-01  | Metal                  | for Review Lever      | 1    |
| 41       | TGB265472-0A  | Brake Lever Ass'y      |                       | 1    |
| 42       | TGP265471-0C  | Take-up Lever Ass'y    |                       | 1    |
| 43       | T47520-001    | Lever Spring           |                       | 1    |
| 44       | TGP265571-0A  | Idler Pulley Ass'y     |                       | 1    |
| 45       | TFB291414-01  | Rec. Safety Lever      |                       | 1    |
| 46       | TFB265535-01  | Select Lever           | for Stop/Eject        | 1    |
| 47       | *TFW305443-01 | Select Lever Spring    | "                     | 1    |
| 48       | *TGB305404-0B | Motor Bracket Ass'y    |                       | 1    |
| 49       | MHI5C2HDN     | Motor                  |                       | 1    |
| 50       | TFH349418-01  | Motor Pulley           |                       | 1    |
| 51       | TRS2603Z      | Screw                  |                       | 1    |
| 52       | TEW349307-0A  | Flywheel Ass'y         |                       | 1    |
| 53       | TEB349419-01  | Capstan Belt           |                       | 1    |
| 54       | VKL4103-01    | Flywheel Holder        |                       | 1    |
| 55       | TEP349420-01  | Thrust Screw           |                       | 1    |

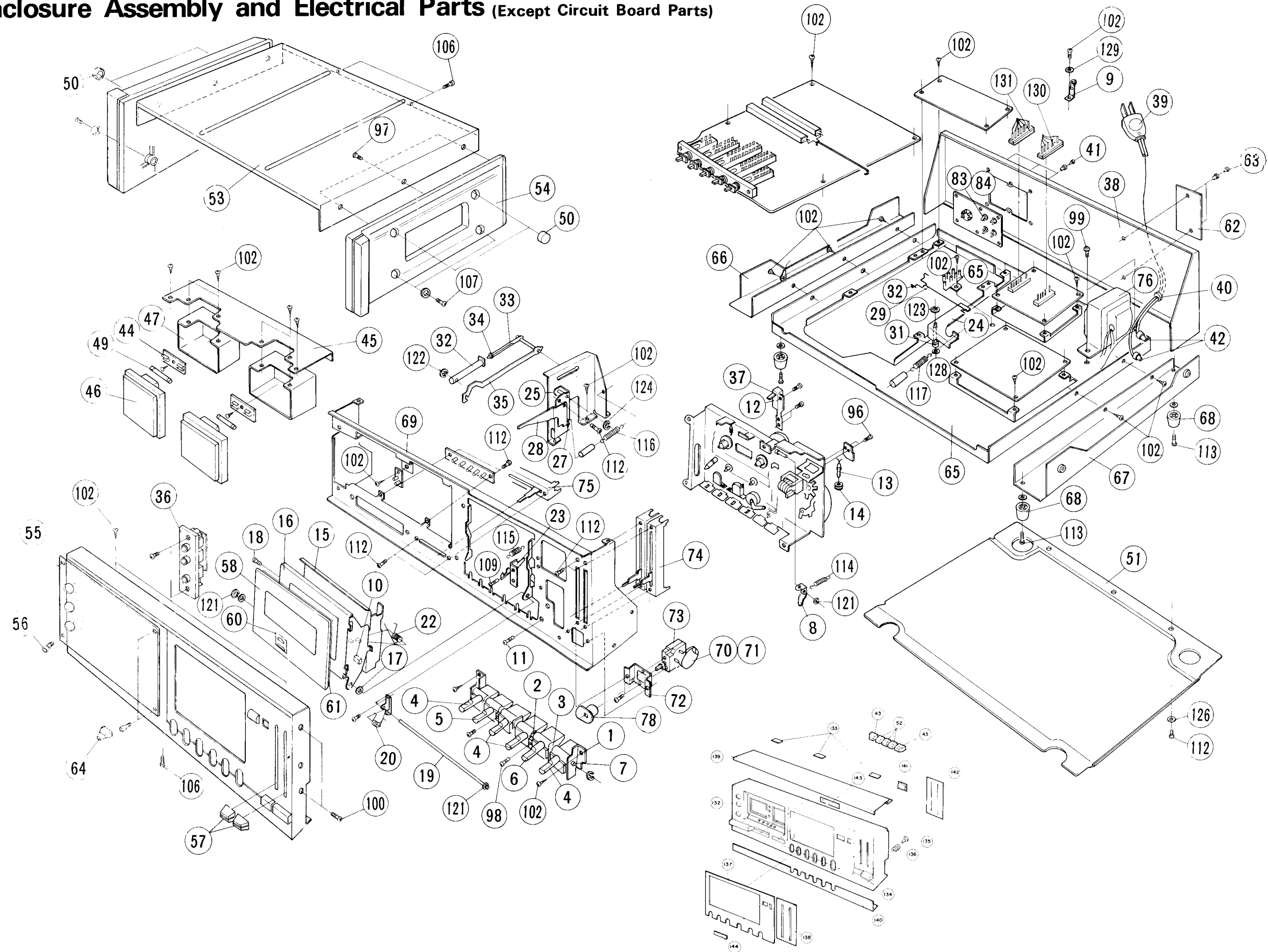
| Ref. No. | Parts No.     | Parts Name               | Remarks   | Q'ty |
|----------|---------------|--------------------------|---|------|
| 56       | TEB265497-01  | Take-up Belt             |   | 1    |
| 57       | *TGW305303-0A | Counter Ass'y            |   | 1    |
| 58       | *TFB265495-02 | Plate                    |   | 1    |
| 59       | TFB349415-01  | Counter Bracket          |   | 1    |
| 60       | TEB345476-01  | Counter Belt             |   | 1    |
| 61       | *TGB305409-0B | Pause Bar Ass'y          |   | 1    |
| 62       | QSP1210-011   | Push SW Ass'y            | for Pause   | 1    |
| 63       | TFB349417-01  | Pause SW Bracket         |   | 1    |
| 64       | *TFB305411-01 | Bracket                  | for Pause Bar   | 1    |
| 65       | *TDP281305-02 | DC Solenoid              |   | 1    |
| 66       | TFH281422-01  | Pin                      |   | 1    |
| 67       | TFB349416-01  | Pause Arm                |   | 1    |
| 68       | *TFW305413-01 | Wire                     |   | 1    |
| 69       | *TFB265543-02 | Pause Lever              |   | 1    |
| 70       | TFB291411-02  | Cassette Holder          |   | 1    |
| 71       | *TJP305451-01 | Reflection Plate         |   | 1    |
| 72       | *TFH305442-01 | Special Screw            |   | 1    |
| 73       | *TGB305432-0A | Holder Bracket (L) Ass'y | TFB349310-01 or 0AT   | 1    |
| 74       | TDP294319-0A  | DC Solenoid              |   | 1    |
| 75       | TFB265458-03  | Solenoid Bracket         |   | 1    |
| 79       | TFB265456-01  | Guide Plate              |   | 1    |
| 80       | *TFB265550-02 | Rec. Lock Lever          |   | 1    |
| 81       | *TGB305430-0A | Holder Bracket Ass'y     |   | 1    |
| 82       | *TFB305429-01 | Bracket                  |   | 1    |
| 83       | T30155-001    | Si. Diode                |   | 2    |
| 84       | THC037417-01  | Head Plate               | SA for REC/PB Head  | 1    |
| 85       | TER357465-01  | Cushion Rubber           |   | 3    |
| 86       | TFH345468-01  | Motor Screw              |   | 3    |
| 88       | TFB345469-01  | Rubber Stopper           |   | 1    |
| 89       | T30300-153    | Spring                   |   | 1    |
| 90       | " -140        | "                        | Brake Lever   | 1    |
| 91       | " -121        | "                        | Lock Lever  | 1    |
| 92       | " -126        | "                        | Idler   | 1    |
| 93       | " -132        | "                        | Button Cam  | 1    |
| 94       | " -151        | "                        | Idler   | 1    |
| 95       | " -136        | "                        | Rec. Bar  | 1    |
| 96       | " -137        | "                        | Stop Bar  | 1    |
| 97       | " -139        | "                        | Play Bar — Slide Bar  | 1    |
| 98       | T30301-122    | "                        | Rew. Bar  | 1    |
| 99       | " -155        | "                        | Flywheel  | 1    |
| 100      | " -106        | "                        |   | 1    |
| 101      | " -115        | "                        | E. Head Special Screw   | 2    |
| 102      | T47828-001    | Nut                      | M8 x 0.75   | 1    |
| 103      | NNS2000N      | "                        | Micro SW  | 2    |
| 105      | NTB3000S      | Nut                      | Solenoid  | 1    |
| 106      | SSSP2604Z     | Screw                    | Bracket   | 2    |
| 107      | SSSP2012Z     | "                        | Micro SW  | 2    |
| 109      | SPSP2008Z     | Screw                    | Rec./PB Head, E. Head, Stopper  | 5    |
| 110      | SPSP2010Z     | "                        | Rec. Spring   | 1    |
| 111      | SPSP2012Z     | "                        | Spring  | 1    |
| 112      | SPSP2604Z     | "                        | Spring Plate  | 1    |
| 113      | LPSP2005Z     | "                        | Brake Arm, Cassette Holder, Stopper, Review Lever, Pause Bar, Holder Bracket, Motor Bracket, Rew. Arm, Holder Bracket | 18   |
| 114      | LPSP2006Z     | "                        | FF Arm Holder   | 5    |

| Ref. No. | Parts No.    | Parts Name   | Remarks  | Q'ty |
|----------|--------------|--------------|--|------|
| 115      | LPSP2604Z    | Screw        | Solenoid, Guide Plate, Counter Bracket, SW Bracket, Rubber Stopper | 6    |
| 116      | LPSP2605Z    | "            | DC Solenoid, Switch Bracket, Motor Bracket                         | 10   |
| 118      | LPSP2608Z    | Screw        | Motor  | 3    |
| 119      | LPSP3005ZS   | "            | Counter  | 2    |
| 120      | WLS2000      | Washer       | Micro Switch   | 2    |
| 121      | WLS3000      | "            | Solenoid   | 1    |
| 122      | WNS2000N     | "            | Rec./PB Head   | 2    |
| 123      | Q03091-154   | "            | Motor  | 3    |
| 124      | WNB2600N     | "            | Solenoid   | 2    |
| 125      | Q03093-430   | "            | Slide Base   | 2    |
| 126      | Q03093-610   | "            | Idler Pulley   | 2    |
| 127      | Q03093-827   | "            | Flywheel   | 1    |
| 128      | REE1000      | "E"-Ring     | Idler  | 1    |
| 129      | REE1200      | "            | Disc Ass'y, Switch Lever, Idler Pulley                             | 4    |
| 130      | REE1500      | "            | Pin  | 1    |
| 131      | REE2000      | "            | Playback Bar, Slide Base, Pinch Roller, Brake Laver, Pause Arm     | 8    |
| 132      | REE2500      | "            | Pause Bar — Pause Lever, Stop Bar, Take-up Lever, Stop/Eject       | 6    |
| 133      | REE4000      | "            |  | 1    |
| 134      | Q03093-522   | Washer       | Flywheel   | 1    |
| 135      | WNS2600N     | "            | Spring Plate   | 1    |
| 136      | TEP305463-01 | Spring Plate |  | 1    |
| 142      | T47829-001   | Washer       |  | 1    |
| 143      | Q03093-621   | "            | for Flywheel   | 1    |
| 144      | Q03093-504   | "            |  | 1    |
| 145      | Q03093-505   | "            |  | 1    |
| 146      | WLS2000      | Lock Washer  |  | 2    |
| 147      | SPSP2003Z    | Screw        |  | 2    |

## Mechanical Components



# Enclosure Assembly and Electrical Parts (Except Circuit Board Parts)





## Enclosure Ass'y and Electrical Parts List except Circuit Board Parts

| Ref. No. | Parts No.     | Parts Name                 | Remarks                        | Q'ty  |
|----------|---------------|----------------------------|--------------------------------|-------|
| 1        | TFB305310-01  | Button Frame               |                                | 1     |
| 2        | TJM330406-01  | Button Holder              |                                | 2     |
| 3        | *TFB305428-02 | Push Button Spacer         |                                | 3     |
| 4        | TJB305311-0A  | Push Button Ass'y          |                                | 4     |
| 5        | " -0B         | "                          | for REC                        | 1     |
| 6        | " -0C         | "                          | for Stop/Eject                 | 1     |
| 7        | TFH291457-01  | Push Button Shaft          |                                | 1     |
| 8        | TGB291485-0A  | Bracket Ass'y              |                                | 1     |
| 9        | TAW272462-01  | Lug                        |                                | 1     |
| 10       | TJN265423-05  | Panel Cushion              |                                | 1     |
| 11       | T42483-004    | FT Screw                   | for Mecha.                     | 4     |
| 12       | TFB349421-01  | Switch Bracket             | for Muting SW                  | 1     |
| 13       | T46821-002    | Pilot Lamp                 |                                | 1     |
| 14       | 53492         | Rubber Bushing             |                                | 1     |
| 15       | TGB291423-0A  | Cassette Holder Ass'y      |                                | 1 set |
| 16       | TGB291322-0E  | Cassette Door Holder Ass'y |                                | "     |
| 17       | TFB305461-01  | Washer                     | for Cassette Door              | 2     |
| 18       | SSSP3008RS    | Screw                      | for Cassette Holder            | 1     |
| 19       | TFH305445-01  | Shaft                      |                                | 1     |
| 20       | TFW305435-01  | Spring                     |                                | 1     |
| 21       | TJN271501-07  | Himelon Sheet              |                                | 6     |
| 22       | TFW305458-01  | Spring                     |                                | 1     |
| 23       | TJB330415-0A  | Lock Arm Ass'y             |                                | 1 set |
| 24       | TFB305414-02  | Rec. Arm (1)               |                                | 1     |
| 25       | TGB305416-0B  | Rec. Bracket Ass'y         |                                | 1 set |
| 26       | T44341-001    | Rubber Tire                |                                | 1     |
| 27       | TFB305453-01  | Rec. Arm (2)               |                                | 1     |
| 28       | TFB305454-01  | " (3)                      |                                | 1     |
| 29       | TFW305419-01  | Rod                        |                                | 1     |
| 30       | T47946-001    | Rec. Rod                   |                                | 1     |
| 31       | TFH305462-01  | Stud                       |                                | 1     |
| 32       | TEP267495-0B  | Brake Pipe Ass'y           |                                | 1 set |
| 33       | TEP267490-03  | Brake Shaft                |                                | 1     |
| 34       | TER267508-02  | "O" Ring                   |                                | 1     |
| 35       | TGB305457-0A  | Brake Arm Ass'y            |                                | 1 set |
| 36       | TAJ305307-02  | Jack Ass'y                 | for Mic. & Headphone           | "     |
| 37       | T30483-00C    | Slide Switch               | S106, 206 for Muting           | 1     |
| 38       | TFB330103-01  | Rear Bracket               | KD-S200-2A/B/E                 | 1     |
|          | TFB330103-02  | "                          | KD-S200-2C/J/U                 | 1     |
| 39       | QMP2500-200   | Power Cord with Plug       | KD-S200-2A                     | 1     |
|          | QMP9017-007BS | Power Cord                 | KD-S200-2B                     | 1     |
|          | QMP1200-244   | Power Cord with Plug       | KD-S200-2C/J                   | 1     |
|          | QMP3900-183   | "                          | KD-S200-2E                     | 1     |
|          | QMP7600-183   | "                          | KD-S200-2U                     | 1     |
| 40       | QHS3876-162   | Cord Stopper               | KD-S200-2A/C/E/J/U             | 1     |
|          | QHS3876-162BS | "                          | KD-S200-2B                     | 1     |
| 41       | E48729-001    | Plastic Rivet              | for Jack Ass'y                 | 6     |
| 42       | TAW000504-01  | Connector                  | for Power Cord, KD-S200-2C/J/U | 2     |
| 43       | TJK363202-01  | Knob "A"                   | for Push SW                    | 2     |
| 44       | TMG1121-00B   | Lamp Holder                |                                | 2     |
| 45       | TFB330307-01  | Meter Bracket              |                                | 1     |
| 46       | TDM330305-01  | Lever Meter                |                                | 2     |
| 47       | TFB330404-01  | Lamp Cover                 |                                | 2     |
| 48       | T43595-003    | Double Face                | for Meter (3 x 55)             | 4     |
| 49       | QLP4101-007   | Pilot Lamp                 | PL 1, 2                        | 2     |

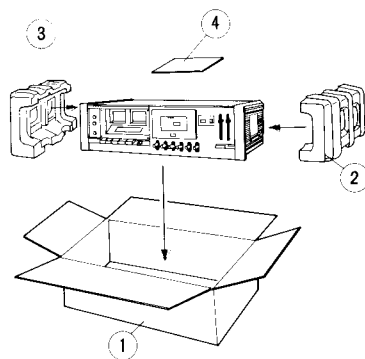
| Ref. No. | Parts No.      | Parts Name           | Remarks                            | Q'ty  |
|----------|----------------|----------------------|------------------------------------|-------|
| 50       | E61066-001     | Cap                  | for Side Panel                     | 4     |
| 51       | TFB330104-01   | Bottom Cover         |                                    | 1     |
| 52       | TJK363203-01   | Knob "B"             | for Push Switch                    | 3     |
| 53       | TJC330105-02   | Cover                |                                    | 1     |
| 54       | E10086-001     | Side Panel           |                                    | 2     |
| 55       | TJM330201-02   | Meter Cover          |                                    | 1     |
| 56       | E60919-002     | Special Screw        | for Meter Cover                    | 4     |
| 57       | TJK330206-01   | Slide Volume Knob    | for Rec. Level                     | 2     |
| 58       | TJP291327-0A   | Cassette Power Ass'y |                                    | 1 set |
| 59       | TJP330303-01   | Cassette Door Plate  |                                    | 1     |
| 60       | TJL271485-01   | Mark                 |                                    | 1     |
| 61       | TJS305450-01   | Double Face          |                                    | 1     |
| 62       | TJL000342-38   | Name Plate           | KD-S200-2A                         | 1     |
|          | " -39BS        | "                    | KD-S200-2B                         | 1     |
|          | " -40          | "                    | KD-S200-2C                         | 1     |
|          | " -10          | "                    | KD-S200-2E                         | 1     |
|          | " -41          | "                    | KD-S200-2J                         | 1     |
|          | " -42          | "                    | KD-S200-2U                         | 1     |
| 63       | E48729-002     | Plastic Rivet        |                                    | 2     |
| 64       | E60879-001     | Slide Knob           | for Output Level                   | 1     |
| 65       | TFC305102-02   | Amp. Chassis         |                                    | 1     |
| 66       | TFC330209-01   | Amp. Chassis (L)     |                                    | 1     |
| 67       | TFC330210-01   | " (R)                |                                    | 1     |
| 68       | TJF330408-01   | Foot                 |                                    | 4     |
| 69       | TFB330102-03   | Front Bracket        |                                    | 1     |
| 70       | QFA72BM-223    | M.M. Capacitor       | S1 for Power, KD-S200-2C/J         | 1     |
|          | QFM43AM-223    | "                    | " KD-S200-2U                       | 1     |
| 71       | T47047-001     | Condenser Cap        | KD-S200-2J/U                       | 1     |
| 72       | TFB330412-01   | SW Bracket           |                                    | 1     |
| 73       | QSP2111-011    | Push Switch          | S1 for Power, KD-S200-2A/E         | 1     |
|          | QSP2111-011BS  | "                    | " KD-S200-2B                       | 1     |
|          | QSP1110-222    | "                    | " KD-S200-2C/J                     | 1     |
|          | QSP1110-221    | "                    | " KD-S200-2U                       | 1     |
| 74       | QVS4C3A-054L   | V. Resistor          | 50 k $\Omega$ (A) VR102, 202       | 2     |
| 75       | QVS2C7A-014    | "                    | 10 k $\Omega$ (A) VR106, 206       | 1     |
| 76       | TAP330306-03   | Power Transformer    | KD-S200-2A/E                       | 1     |
|          | TAP330306-03BS | "                    | KD-S200-2B                         | 1     |
|          | TAP334301-01   | "                    | KD-S200-2C/J                       | 1     |
|          | TAP360301-01   | "                    | KD-S200-2U                         | 1     |
| 77       | 51739-2        | Lug                  |                                    | 2     |
| 78       | TJS338446-02   | SW. Holder           | for Power Switch                   | 1     |
| 79       | QSS2325-006    | Slide Switch         | for Voltage Select SW KD-S200-2A/E | 1     |
|          | QSS2325-006BS  | "                    | " KD-S200-2B                       | 1     |
|          | QSS2325-004    | "                    | " KD-S200-2U                       | 1     |
| 80       | TFB305464-01   | Spring Bracket       |                                    | 1     |
| 81       | SPSP2610Z      | Screw                |                                    | 1     |
| 82       | E46651-001     | Wrapping Terminal    |                                    | 1     |
| 83       | TAJ271307-02   | Jack Ass'y           | PIN & DIN                          | 1     |
| 84       | TAA305459-01   | C. Board             | PIN                                | 1     |
| 94       | DPSP3012ZS     | Screw                | for Bottom Cover                   | 1     |
| 95       | LPSP2005Z      | "                    |                                    | 2     |
| 96       | SPSP2005Z      | "                    | for CdS Circuit Board              | 2     |
| 97       | SBSB3010Z      | "                    | for Side Panel                     | 6     |
| 98       | SPSP2614Z      | "                    | for Button Holder                  | 2     |

| Ref. No. | Parts No.     | Parts Name             | Remarks   | Q'ty  |
|----------|---------------|------------------------|---|-------|
| 99       | DPSP4006Z     | Screw                  | for Power Transformer   | 2     |
| 100      | SSSP3006ZS    | "                      | for Front Panel   | 2     |
| 101      | SBSB3005Z     | Tapping Screw          | for Lug   | 1     |
| 102      | SBSB3006Z     | "                      | for Front Panel, Button Frame, Rear Bracket, Indicator C. Board, Lamp Cover, Meter Bracket, Lamp Holder Amp. Chassis, Wrapping Terminal, Front Bracket, Main Amp, Power Supply, Super ANRS and Peak Level C. Boards | 58    |
| 103      | SBSB3008Z     | "                      | for Bottom Cover  | 3     |
| 104      | SDBP3006RS    | Screw                  | "   | 2     |
| 105      | SDBP3008RS    | "                      | for Voltage Select SW. KD-S200-2A/B/E/U   | 2     |
| 106      | SDBP3010RS    | "                      | for Front Panel, Rear Bracket, Back Cover   | 3     |
| 107      | SDBP4014RS    | "                      | for Side Panel  | 4     |
| 108      | LPSP2004Z     | "                      | for Head and CdS C. Board   | 4     |
| 109      | LPSP2604Z     | "                      | for Lock Arm Ass'y, Bracket   | 7     |
| 110      | LPSP2606Z     | "                      | for Front Lock Arm SP   | 1     |
| 111      | LPSP2616ZS    | "                      | for Jack Ass'y  | 2     |
| 112      | LPSP3006ZS    | "                      | for Front Panel, Rear Bracket, Push SW, SW Bracket, V. Resistor   | 15    |
| 113      | LPSP3022ZS    | "                      | for Foot  | 4     |
| 114      | T30300-111    | Spring                 | for Push Button   | 6     |
| 115      | " -125        | "                      |   | 1     |
| 116      | " -134        | "                      |   | 1     |
| 117      | " -152        | "                      |   | 1     |
| 118      | " -154        | "                      |   | 1     |
| 119      | T30301-105    | "                      |   | 6     |
| 120      | NTB3000       | Nut                    | for Voltage Select SW KD-S200-2A/B/E/U  | 2     |
| 121      | REE2000       | "E" Ring               | for Bracket Ass'y, Brake Pipe Ass'y, Brake Shaft  | 3     |
| 122      | REE2500       | "                      | for Shaft   | 2     |
| 123      | REE300        | "                      | for REC Arm (1), Brake Arm  | 2     |
| 124      | REE4000       | "                      | for Push Button Shaft   | 3     |
| 125      | WNB2600N      | Washer                 | for Jack Ass'y  | 2     |
| 126      | WNB3000N      | "                      | for Voltage Select SW, Bottom Cover   | 5     |
| 127      | WNB4000N      | "                      | for Side Panel  | 4     |
| 128      | WLS4000       | "                      | for Stud (Amp. Chassis)   | 1     |
| 129      | WSB4000N      | "                      | for Lug   | 1     |
| 130      | QMC0557-001   | Socket Ass'y           |   | 1     |
| 131      | QMC0657-001   | "                      |   | 1     |
| 132-134  | ZCKDS2002CBF  | Front Panel Sub. Ass'y |   | 1 set |
| 132      | TJM330101-02  | Front Panel            |   | 1     |
| 133      | TJN265423-05  | Cushion                | for Front Panel   | 3     |
| 134      | TJB330204-02  | Power SW. Button "A"   |   | 1     |
| 135      | TJB330205-01  | " " "B"                |   | 1     |
| 136      | TJB291306-02  | Spring                 |   | 1     |
| 137      | *TJP330301-03 | Plate "A"              | for Cassette  | 1     |
| 138      | TJP330302-01  | Plate "B"              | for REC Volume  | 1     |
| 139      | TJE330207-01  | Fitting "A"            |   | 1     |
| 140      | TJE330208-03  | " " "B"                |   | 1     |
| 141      | TJB330405-01  | Counter Lens           |   | 1     |
| 142      | TJN330407-01  | Volume Net             | for REC LEVEL   | 2     |
| 143      | TJN330407-01  | "                      | for OUTPUT LEVEL  | 1     |
| 144      | *TJL363402-01 | Super ANRS Mark        |   | 1     |

## Accessories

| Parts No.      | Parts Name             | Remarks                       | Q'ty |
|----------------|------------------------|-------------------------------|------|
| CN-201         | DIN Cord Ass'y         | KD-S200-2B/E                  | 1    |
| T30046-00B     | PIN Cord Ass'y         | KD-S200-2A/C/J/U              | 2    |
| T47796-00B     | Head Cleaning Stick    |                               | 2    |
| AP4056A-024    | Envelope               | for Head Cleaning Stick       | 1    |
| TLT000429-01   | Caution Card           | "                             | 1    |
| TLT305452-02   | "                      | for Cassette Loading          | 1    |
| TLT052401-01   | Warning Label          | KD-S200-2A/E/U                | 1    |
| TLT052401-01BS | "                      | KD-S200-2B                    | 1    |
| QZL1002-003BS  | "                      | for Power Cord, KS-S200-2B    | 1    |
| TLT279401-01   | Caution Card for Frans | KD-S200-2E                    | 1    |
| T46965-002     | Demo. Cassette         | DT-626                        | 1    |
| TLJ000476-02   | ANRS Seal              |                               | 1    |
| TLJ000477-02   | Super ANRS Seal        |                               | 1    |
| TJL000443-01BS | Seal                   | for Front Panel, KD-S200-2B   | 1    |
| TLT000505-01   | UL/CSA Caution Label   | for Bottom, KD-S200-2C/J      | 2    |
| BT20025        | Warranty Card          | KD-S200-2C                    | 1    |
| BT20032        | "                      | KD-S200-2J                    | 1    |
| BT20024B       | Special Reply Card     | KD-S200-2J                    | 1    |
| T44362-001     | CSA Marker             | KD-S200-2C                    | 1    |
| T46328-003     | Caution Card           | AC 240 V, KD-S200-2A/B        | 1    |
| T46328-004     | "                      | AC 220 V, KD-S200-2E          | 1    |
| BT20023        | Service Procedure      | KD-S200-2J                    | 1    |
| T40328-001     | Caution Card           | KD-S200-2U                    | 1    |
| QZL1001-001    | UL Label               | KD-S200-2J                    | 1    |
| BT20013        | Guarantee Certificate  | KD-S200-2B                    | 1    |
| BT20029        | Warranty Card          | KD-S200-2A                    | 1    |
| BT20015        | "                      | for PX (KANAZAWA), KD-S200-2U | 1    |
| E7795-1        | EP Mark                | KD-S200-2U                    | 1    |
| E04056-001     | Conti. Plug            | for SANSEI, KD-S200-2U        | 1    |
| T7737EGF       | Instruction Book       |                               | 1    |

## Packing



| Ref. No. | Parts No.     | Parts Name         | Remarks              | Q'ty  |
|----------|---------------|--------------------|----------------------|-------|
| 1-2      | TKB330410     | Packing Case Ass'y |                      | 1 set |
| 1        | TKB330410     | Case               |                      | 1     |
| 2        | TKC330106-01  | Cushion            | Left                 | 1     |
|          | TKC330207-01  | "                  | Right                | 1     |
|          | AP4056A-036   | Envelope           | for PIN or DIN Cord  | 1     |
| 3        | QPGA065-06005 | "                  | for Set              | 1     |
|          | AP4056A-077   | "                  | for Instruction Book | 1     |

# JVC

VICTOR COMPANY OF JAPAN, LIMITED.

RADIO & RECORDING MACHINE DIVISION 804 Futoo-cho, Kohoku-ku, Yokohama, Japan



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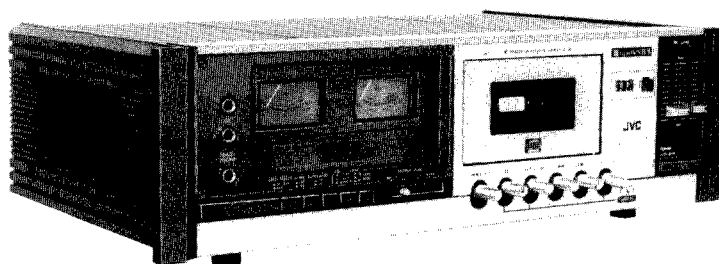
# JVC

## Supplementary **SERVICE MANUAL**

MODEL

**KD-S200-2A/B/C/E/J/U**

STEREO CASSETTE DECK



This manual is supplementary of KD-S200-2A/B/C/E/J/U service manual (No. 4157) to improve performance and other reasons.

Please add this comparative table to service manual (No. 4157) and give an order to us for the parts concerned to keep them as spare.

# KD-S200-2A/B/C/E/J/U (No. 4157)

| Page | Line | Original                     |              |                 | NEW                    |                            |                      |                                       |        |
|------|------|------------------------------|--------------|-----------------|------------------------|----------------------------|----------------------|---------------------------------------|--------|
|      |      | Ref. No.                     | Parts No.    | Parts Name      | Ref. No.               | Parts No.                  | Parts Name           | Remarks                               | Q'ty   |
|      |      | (Main Amp. Circuit Board)    |              |                 |                        |                            |                      |                                       |        |
| 20   | 33   | R147, 247                    | QRD141K-473  | C. Resistor     | R147, 247              | QRD141R-683                | C. Resistor          | 68 kΩ ¼ W =501~                       | 2      |
| 21   | 12   | C134, 234, 133, 233          | QFM41HK-152  | Mylar Capacitor | C134, 234<br>C133, 233 | QFM41HK-152<br>QFM41HJ-102 | Mylar Capacitor<br>" | 0.0015 μF 50 V =501~<br>0.01 μF =501~ | 2<br>2 |
|      |      | (Power Supply Circuit Board) |              |                 |                        |                            |                      |                                       |        |
| 25   | 14   | R615                         | QRD142K-332  | C. Resistor     | R615                   | QRD142K-333                | C. Resistor          | 33 kΩ ¼ W =501~                       | 1      |
|      | 15   | R617                         | " -222       | "               |                        |                            | "                    | (Cancel)                              |        |
|      | 22   | R627                         | QRD143K-331  | "               | R627                   | QRD143K-562                | "                    | 5.6 kΩ ¼ W =501~                      | 1      |
|      | 45   | D606-614                     | T30155-001   | Si. Diode       | D607-614<br>D617       | 10E1<br>MA150              | Si. Diode<br>"       | =501 (Addition)                       | 8<br>1 |
|      |      | (Mechanical Component)       |              |                 |                        |                            |                      |                                       |        |
| 28   | 23   | 23                           | T45640-001   | Wire Holder     | 23                     | VKZ4001-009                | Wire Holder          | Head Wire Clamp                       | 2      |
| 33   | 17   | 17                           | TFB305461-01 | Washer          | 17                     | TFB305428-01               | Washer               | for Cassette Door                     | 2      |
| 34   | 27   | 70                           | QFM43AM-223  | M.M. Capacitor  | 70                     | QFH53AM-223                | M.M. Capacitor       | S1 for Power, KD-S200-2U              | 1      |
|      | 41   | 78                           | TJS338446-02 | SW. Holder      | 78                     | TJS338446-04               | SW. Holder           | for Power Switch                      | 1      |
| 35   | 1    | 99                           | DPSP4006Z    | Screw           | 99                     | LPSP4006ZS                 | Screw                | for Power Transformer                 | 2      |
|      | 28   | 127                          | WNB4000N     | Washer          | 127                    | WNB4000N                   | Washer               | for Side Panel, Power Transformer     | 6      |
|      |      |                              |              |                 |                        | QEW41EA-105N               | E. Capacitor         | C628, =501~ (Addition)                | 1      |
|      |      |                              |              |                 |                        | Q03093-502                 | Washer               | for Power Switch, =501~ (Addition)    | 1      |
|      |      |                              |              |                 |                        | WNS3000N                   | Washer               | for Cover, =501~ (Addition)           | 2      |
| 36   |      |                              | E04056-001   | Conti. Plug     |                        | V04062-001                 | Siemens Plug         | KD-S200-2U                            | 1      |
|      |      | (Accessories)                |              |                 |                        |                            |                      |                                       |        |

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